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THE SPHERE
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The Empire's Illustrated Weekly
London, October 26, 1940

PREPARING FOR A TRIP OVER GERMANY

The Crew of a Wellington Get Ready for Another Raid

The beginning of this week witnessed a resumption of the bombing of Berlin and Northern Italy. Both these areas have already experienced the might of the R.A.F.; and it is the opinion of many in Britain (supported by the statements of responsible Ministers) that there are heavier attacks still to come. At the moment of writing, 225 British planes have already flown over Berlin; this figure will doubtless be increased considerably as the nights get longer. And Italy, too, will begin to feel the weight of British bombs. In these long-distance raids one of the types of aircraft used is the Wellington, which is very suited for this work: it is capable of high-level flights extending many hundreds of miles over enemy territory, it carries a very heavy load of bombs, and it is well protected with defensive armament. This picture shows the nose of one of these fine aircraft with its power-operated turret, and its crew of five about to take their places for a raid

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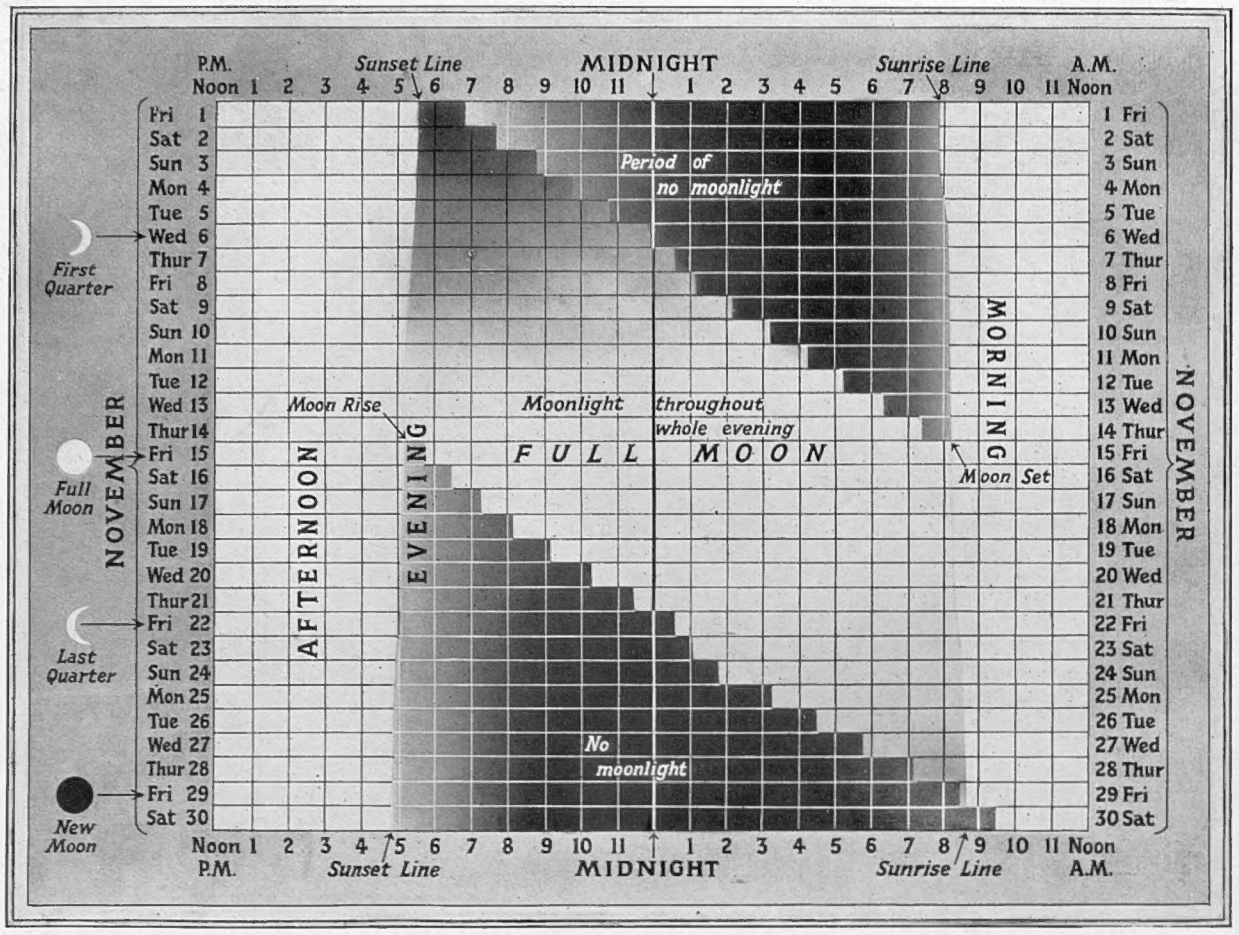
A WAR NEWSLETTER —No. 60

32-34, ST. BRIDE STREET, E.C.4

OUR DAILY BREAD: THE DAY'S NEWS.—No doubt some of those who listen frequently to the wireless begin to complain that too much of it is devoted to bombing results here and in Germany. Not all of us, of course; that news is very much to the taste of many listeners. It is possible, since there is a time limit even to a news bulletin, that if there were more authentic news of other fields of war, the bombing details would be reduced. The B.B.C. rightly tries to confine itself to authentic news and to be chary of reporting rumour. In this war progress is sometimes slow, sometimes too rapid to assimilate. Of late, it has been slow in action, if rich in manœuvre for position. When you are being ruthlessly bombed, and replying in kind, bombing is front page news until the very word becomes boring. Of late, therefore, inevitably we have received a lion's share of news of bombing and would be glad of variations. (What a blessing was that dispatch from the C.-in-C., Mediterranean, with his breezy account of a naval engagement.) But many of the alternatives to authentic news are not really good for us, and the B.B.C. and responsible journals very rightly give them little prominence. Much of the rumour and gossip supplied by foreign diplomatic correspondents does positive harm to our cause, if repeated in the press and by the B.B.C.

THE NEUTRAL NATIONS.—Almost everything which concerns the policy and future actions of still neutral states is mischievous if it has not the authority of the nation concerned. It might, at the short view, suit our book very well to-day if the United States declared war on Germany or if Russia burst over the Eastern borders of Reich territory or that of Reich vassals. We have not the smallest grounds for thinking that either nation desires or intends to enter the war, and we should realise that every rumour or semi-official announcement that recent policy or actions are heading those nations in that direction can do no good and may do harm. It may be that individuals have been "rumoured" into marriage, or that school boys have been jeered into fighting; but nations are not individuals, nor can a nation "think" as an individual. National policy, when it is not shaped by the vanity or will of one man, rarely springs from human, and not always from moral impulses. It is fair to say that almost everything which emerges from these diplomatic hot-beds is unwholesome fungus and not mushroom. It is better left alone by press, radio and public. I am convinced we should all be happier and perhaps saner if we could find the means, and strengthen the will, to confine ourselves rather to news and theories of more general interest and to ration ourselves strictly in the matter of war news and war rumour. Wishful thinking is like brandy, it warms and sustains you for a time and then leaves you colder than before.

BACK TO SCHOOL.—The winter which closes in on us is like to be grim and even boring. Everyone is alive to the necessity of introducing as much colour as maybe. Cheerful company, music, literature, drama, films, sport, all must be kept going. Beyond these and through these there is knowledge, the most colourful factor of all. I refuse to see (or hear) any incongruity in a children's school in full blast these days, with teachers employed in a dozen sidelines of culture and grace—the arts of peace—besides the main objective of the Three R's. I hear the piano tinkling out the March from *Scipio*, the feet of the dancers thundering; I see the drawing blocks filled with life-like flowers and beasts and



MOONLIGHT FOR THE MONTH OF NOVEMBER: The month dealt with above is one usually associated with dank, misty nights when autumn is dying away into winter. The chart shows, as usual, the rising and setting times of the moon, but how much of its light will be obscured by weather conditions remains to be seen. It will be noticed that the sunset line has moved considerably to the left, the sun setting on November 1 at about 5.30 p.m., and at the end of the month at 4.45 p.m. In the first fortnight the moon will be above the horizon at sunset; after the 15th of the month it begins to rise at about six o'clock, and onwards until the end of the month an hour later each day

A limited number of these charts will be supplied free of charge on application to the Publisher, "The Sphere," 32-34, St. Bride Street London, E.C.4, but 2½d. in stamps must be enclosed with the application

collections of flora and fauna deposited in unsuitable places. We are building for the future, as Princess Elizabeth wisely hinted we should do. Not less encouraging to me is my experience with the Home Guard. It, too, is getting down to winter training. Nothing is more heartening than to observe the keenness to learn of countrymen of every calling. To learn to shoot is in their blood. Even more encouraging is their desire to learn subjects which for them en bloc seem more remotely connected with repelling an invader from their homes—such subjects as map-reading and message-writing. Indeed, it is the experience of most of us that a chance of acquiring any knowledge on any subject whatever will bring along 3 miles of muddy lanes to a drafty, ill-lit hut, at the end of a long day's labour, a full 80 per cent. of the Home Guards in an area. To such keenness there can be only one response. Even the old soldier, "broken in the wars" or grown flabby with years and peace, awakens his dormant energies and rubs up his half-forgotten knowledge. And the old maxims and instances and object lessons come back again nearly as clear and fresh as when they were inculcated twenty-five years ago in the back areas of the Somme and Pas de Calais. Then, when we taught and learned, we were young. Now, we are, many of us, old, and, if we regard war through spectacles from which the rose-tint has long since faded, still we regard knowledge even in the valley of death as worth walking and worth working for.

A PSYCHOLOGICAL FACT.—One of the most interesting psychological facts of this war is the tendency of the human mind to jump back into the old world and to resume, at the slightest encouragement, the standards of thought that belonged to our pre-war world. Thus, twelve hours relief from the nuisance of air bombardment or air battles overhead will induce in a man once more a mild interest in *possessions*. He looks again at that picture he bought in Norwich, or the bureau picked up so cheaply at Christie's. Nay, he may revert to a gentle self-pity for his lost peace-time career, or his vanished savings. This is undesirable. This man is reverting to individualism. He is ceasing to be a good citizen in a "beleaguered fortress." *Property.* It is nothing. "'Twas mine, 'tis his, yours, anyone's; and *has made slaves of thousands.*" But there the fact is: a psychological fact of interest. That is why I suggest that it is best to have the drama played out without intervals spent at the bar and in the corridors. The longest tragedy or epic has an end and the sooner it's over, the sooner to sleep. The Nazis are not supermen and they will crack before Britons bend.

INVASION BROADSHEETS.—Lord Crawford has lent to the Wigan Library Committee for exhibition a selection from his well-known collection of broadsheets and relics of the "Invasion scare" of 1803. These Government addresses to the public and other rousing calls to the "Home Guard" and defence services of that day, to employers and employed, to men and women, are curiously exact parallels to the addresses of Ministers to-day in their language and arguments. "Freedom or Slavery" is the key argument. There are references to the "Fifth Columnists" of 1800, there are illustrations of Napoleon's rafts with a regiment of cavalry in the centre of some of them. In these old broadsides, the nation was usually addressed as "Britons"—nothing new in the word. Here are some parallels: "The opulent must come forward with their wealth, the learned with their talents, and all ranks with their persons." "Having enslaved the peoples whom he undertook to free, and plundered and subjugated all order of the inhabitants, rich and poor, he is now determined on the invasion of this united Kingdom and is making the most formidable preparations for that purpose." The appeals for Home Guard volunteers stress exactly the same points as those made in the appeal of 1940. One interesting exhibit is the medal "struck to commemorate Napoleon's entry into London." It is engraved *frappé à Londres 1804!* But it was current in France in 1803! With it is a proclamation by the tyrant purporting to have been issued from St. James's Palace: "Inhabitants of London, be tranquil. The Hero, Pacificator, is come among you. He delights in restoring peace and liberty to all mankind." So the men of Wigan will learn that there is no new thing under the sun. Hitlers are not new nor unconquerable. Goebbels's have babbled and burst. Invasions have threatened—and puffed out: and Britain has risen before to great heights after reaching grievous depths. I doubt not it is still true that Britons never will be slaves.

PRIESTLEY'S TALKS.—I don't suppose Mr. Priestley wants any dewdrop from me, but it gives me pleasure to shed it. As a rule I hate "talks," but his were to my thinking the authentic voice of what is best in this nation, as, officially, is Mr. Churchill's. His humour is all his own and Yorkshire's. It is very satisfying, very warm, and often very delicate. His hates are as obvious as his aspirations. He clearly loathes, and has loathed for years, the mean and outworn conventions which still governed our social life long after they should have been discarded. He feels they should never have survived the Four Years War, and he is determined to prevent them "bobbing up again" after this war. His is the best kind of Socialism; not swift revolution to ideals which can only come slowly, but a steady evolution towards a system of Society which discards for ever shams, shibboleths, and barriers between man and man. To maintain the advance of that evolution, he weekly catalogued the virtues which the war has brought out in the nation, and dismissed acquisitiveness, snobbery, conventionality, and such-like artificialities of half-men.

THE OLD STAGER

TO READERS OF "THE SPHERE"

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May we therefore ask you to accept your copy of THE SPHERE *if previously ordered from your retailer even if it should reach you a few days late through circumstances over which neither he nor ourselves have control.*

CHANGES in the ROYAL NAVY

And the King and Queen's Tour of the Bombed Areas

PROMOTION FOR REAR-ADMIRAL SIR HENRY HARWOOD, who commanded the British Squadron in the River Plate action against the *Graf Spee*. He is to be a Lord Commissioner of the Admiralty and an Assistant Chief of the Naval Staff. Except for three years in civil life, Admiral Harwood has been in the Service since he was a boy. He served as a torpedo officer on H.M.S. *Sovereign* during the last war. He is now fifty-two years of age

THE CAPTAIN OF THE "AJAX"—CAPTAIN E. D. B. McCARTHY: *Ajax* is a 6,985-ton British cruiser, from which Admiral Harwood commanded the historic action off the River Plate. She has now distinguished herself again, in the Mediterranean, under the command of Captain McCarthy, by sinking two Italian destroyers outright and crippling another later. *Ajax* belongs to the Leander class, and was completed by Vickers-Armstrong in 1935

THE NEW COMMANDER-IN-CHIEF OF THE HOME FLEET, VICE-ADMIRAL JOHN C. TOVEY, C.B., D.S.O., who succeeds Admiral of the Fleet Sir Charles M. Forbes. Admiral Tovey is fifty-five years of age and has been in command of the Destroyer Flotillas of the Mediterranean Fleet since 1937. He won the D.S.O. at the Battle of Jutland, in which he commanded the destroyer *Onslow*. Later he was in command of H.M.S. *Rodney* and then of the Naval Barracks at Chatham. He is looked upon as one of the most energetic and capable administrators in the British Navy

THE KING AND QUEEN PAY ANOTHER VISIT TO THE BOMBED AREAS: Accompanied by Admiral Evans, Their Majesties have paid yet another visit to the bombed areas in London. Here the Queen is accompanied by a woman "veteran" of many raids: this lady was wearing her battered tin hat, and wore plaster and bandages over injuries received during recent raids. The King and Queen carried out this latest inspection with their usual close intentness

THE QUEEN WITH MEMBERS OF A RESCUE SQUAD, FROM MANY OF WHOM SHE RECEIVED FIRST-HAND STORIES OF THEIR EXPERIENCES DURING RECENT DAYS AND NIGHTS OF DANGEROUS WORK IN BOMBED AREAS

IN SERIOUS MOOD: THE KING AND QUEEN LISTEN ATTENTIVELY TO A RAID STORY FROM ONE OF THE CIVILIAN OFFICIALS

SOUTH AFRICANS IN EAST AFRICA

TWO PILOTS OF THE SOUTH AFRICAN AIR FORCE, WHO ARE OPERATING IN NORTHERN KENYA: 2ND LIEUTENANT J. P. BLAAUW AND ACTING CAPTAIN C. M. S. GARDNER

2ND LIEUT. C. T. TILBURN, CAPT. P. J. LAGERWAY, AND 2ND LIEUT. C. G. ARMSTRONG

THREE MORE PILOTS OF THE SOUTH AFRICAN AIR FORCE IN NORTHERN KENYA—2nd LIEUTENANT B. FRITZ, LIEUTENANT A. COLENBRANDER AND LIEUTENANT B. GUEST

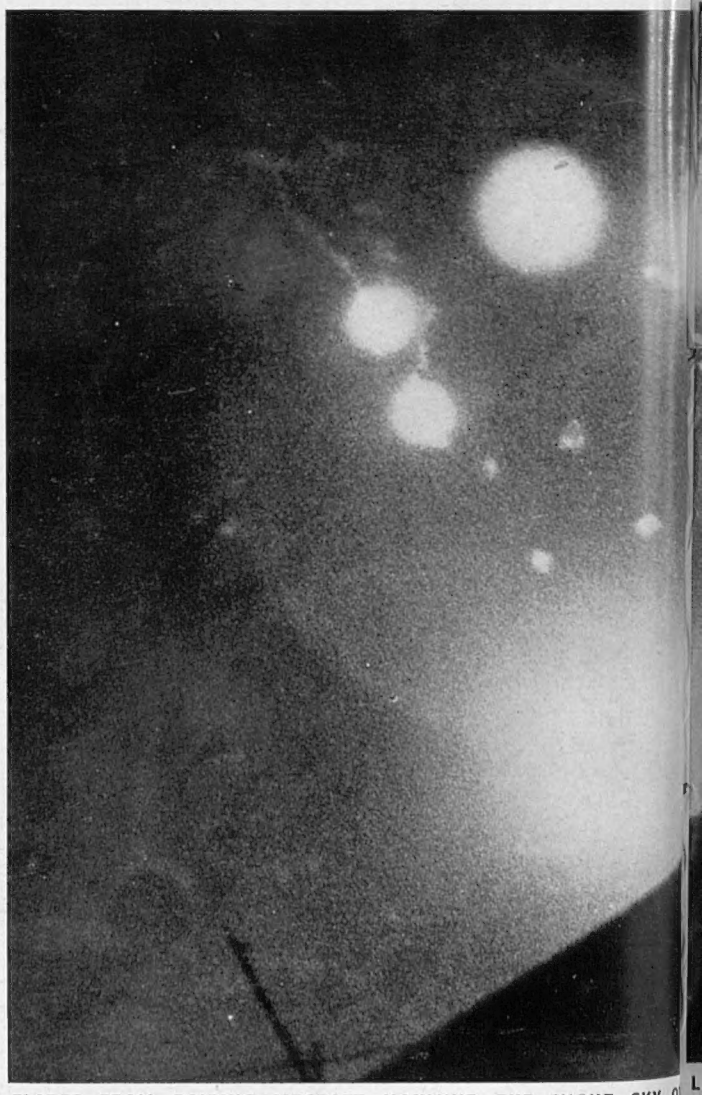
Italy has been attempting to push southwards from her "African Empire" into Northern Kenya; but she is meeting with strong opposition. Amongst the forces arrayed against her are the skilful and determined pilots of the South African Air Force: these men have a considerable knowledge of flying conditions in a continent where heat, mountainous tracts and dense bush country are all encountered in the course of a single flight. Already, the South Africans have put up a very fine show against the Italians

RESCUED BY A BRITISH FLYING BOAT

AFTER DRIFTING FOR FOUR DAYS IN A SMALL BOAT, THESE TWEN

Two hundred miles out in the Atlantic, a Sunderland flying boat of th R.A.F. has just rescued twenty-one survivors of a torpedoed cargo boat wh had spent nearly four days in an open boat. The seamen had had litt water or food whilst in the lifeboat. The Sunderland's captain saw a tin

LONDON BY NIGHT DURING A RAID



FLARES FROM RAIDING AIRCRAFT ILLUMINE THE NIGHT SKY O TRACER SHELLS FROM THE ANTI-AIRCR

During recent raids on London, quite a feature has been the employmen of flares by the enemy to illumine his target. On occasion, there hav been as many as a dozen flares in the sky at one and the same time. The anti-aircraft gunners are becoming quite expert in their prompt destruction however; and it is now rare for the flares to remain longer than a few

AT SEA

ONE MEN WERE RESCUED BY A BRITISH SUNDERLAND FLYING BOAT

light far away on the sea whilst it was still dark: at dawn, he alighted on the water. All twenty-one were taken aboard the flying boat packed "like herrings in a barrel." The crew of the Sunderland were members of a Royal Australian Air Force Squadron of the Coastal Command

LONDON: THESE WERE SOON SHOT OUT OF THE SKY, HOWEVER, BY GUNS OF THE LONDON BARRAGE

seconds before being shot down. When this picture was taken, the German aircraft were not visible, the pilots preferring to remain hidden in the heavy cloud above and to drop their bombs at random. Below and around the four big flares seen here, the smaller puffs show where the tracer shells from the guns are exploding

SPITFIRE BUILDERS AND PILOTS MEET

AIRCRAFT WORKERS FROM A SPITFIRE FACTORY SPEND A DAY AT A R.A.F. FIGHTER STATION: PILOTS AND THE MEN WHO MAKE THE MACHINES ARE HERE EXCHANGING IMPRESSIONS

AIRCRAFT WORKERS AND R.A.F. PERSONNEL EXAMINE THE "POINTS" OF A SPITFIRE FIGHTER

Ten aircraft workers selected from amongst the employees at a Spitfire factory have just spent a day at a fighter station, the first visit of its kind, watching machines which they have built being flown under war conditions. At lunch, in the mess, a pilot sat by each factory worker, and the two classes of men—builders and pilots—were able to exchange impressions of this fine fighter aircraft

BERLIN PREPARES FOR AIR RAIDS

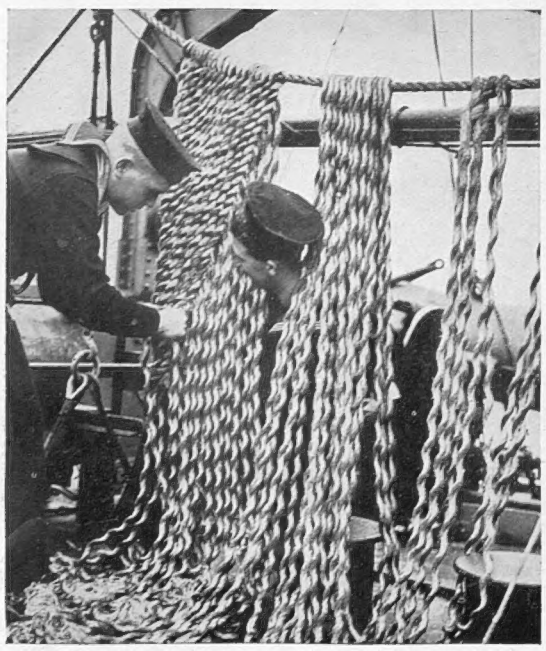
THE EVACUATION OF CHILDREN FROM THE GERMAN CAPITAL IN PREPARATION FOR THE EXPECTED RAIDS ON BERLIN BY THE R.A.F.

This is one of the first pictures to be received in England of the evacuation of the children of Berlin. Thousands of them have now been taken by train to country districts, to escape the heavy bombing which Germans now seem to expect from the R.A.F. Note—and it is a real German touch!—the band which is playing them out, and the display of miniature swastika flags. Berlin, it will be remembered, was long ago promised by Göring immunity from attack from the air; this promise has already been broken many times, and doubtless will continue to be broken again and again in the near future

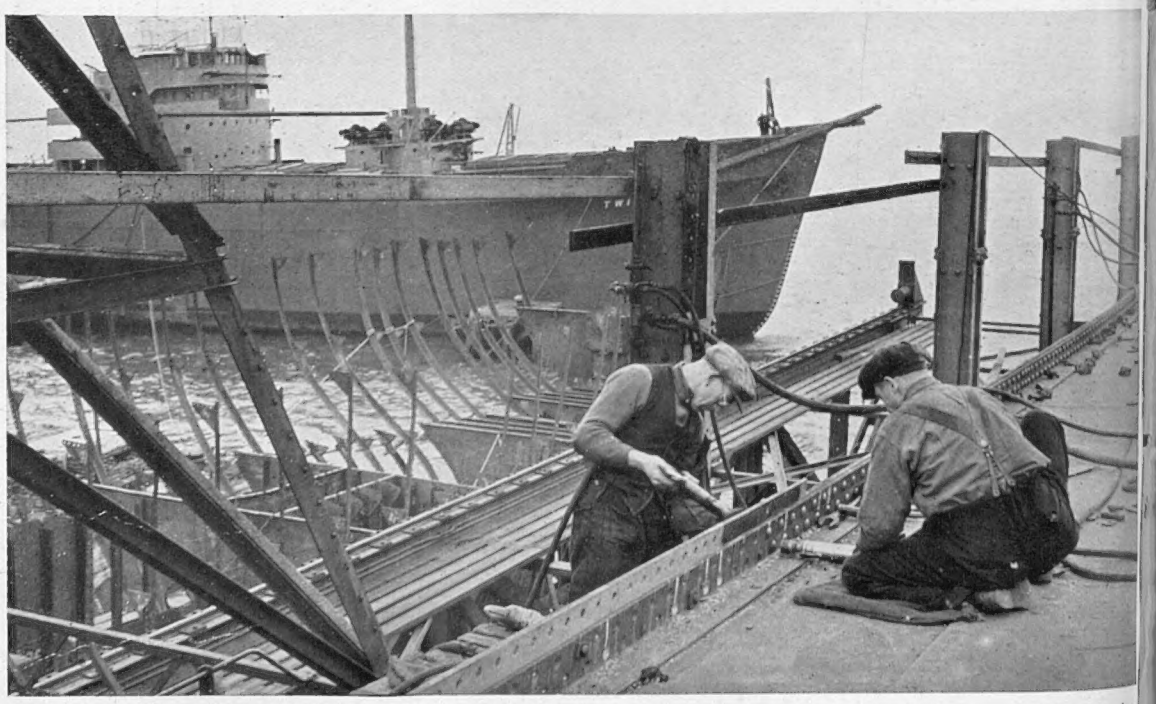
OUT IN MID-ATLANTIC—TWO OF THE FIFTY EX-AMERICAN DESTROYERS EN ROUTE FOR BRITAIN: Many of these "over-age" but still serviceable vessels are now safe in British ports, being prepared for service with the Royal Navy; our American cousins handed them over in wonderful condition, with full equipment and spares

ON THE BRIDGE OF ONE OF THE UNITED STATES DESTROYERS ON THE WAY OVER: Our hard-pressed destroyer flotillas will soon be receiving these very welcome ex-United States vessels

THE CAPTAIN TAKES A SIGHT DURING THE TRANSATLANTIC CROSSING: Just a part of the daily routine on the crossing. The work of bringing the vessels over was undertaken by crews furnished by the Royal Navy



ON BOARD A BRITISH WARSHIP: Paunch matting in progress by sailors: the plaiting of these ropes is a highly skilled job; when finished, the matting is used as fenders for the ship

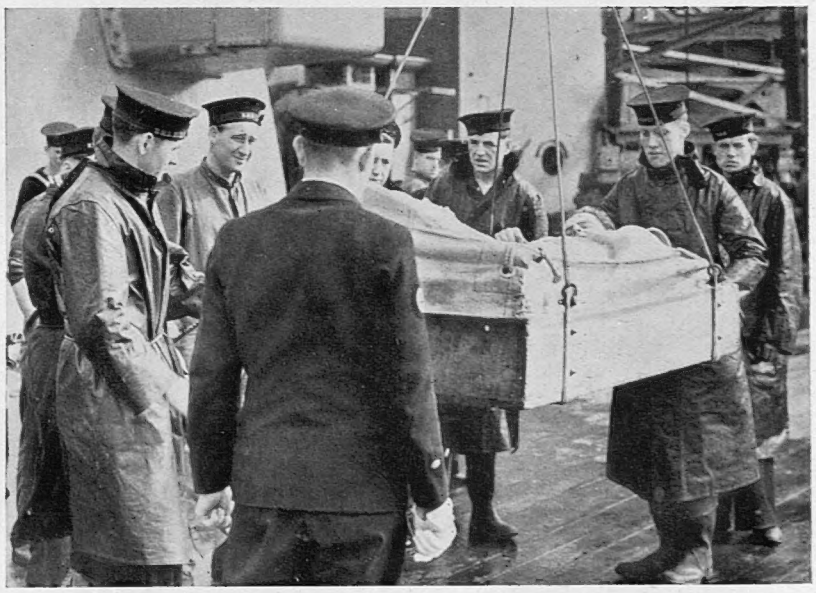


NOT ONLY ARE VESSELS COMING FROM AMERICA, BUT ALSO FROM BRITISH SHIPYARDS: These are working at such a pitch now, air raids or no air raids, that losses by enemy action are quickly being replaced by new ships. Despite that these are being turned out in considerable numbers, however, there has been no reduction in the quality of workmanship: our native shipbuilders are, in fact, showing once again that they are amongst the best in the world. In this picture rivetters are seen at work on the deck of a new ship; just behind them is the framework of another vessel newly started, whilst behind this again is a third vessel, finished and launched. The stocks in this shipyard are never idle!

THE DESTROYERS in MID-ATLANTIC: AND OTHER SCENES OF THE ROYAL NAVY AT ITS WAR-TIME OCCUPATIONS

A BATTLE CRUISER STEAMS OUT OF HARBOUR FOR DUTY WITH THE BRITISH FLEET: Without cessation the work of the Navy goes on day and night. These mighty watchdogs of Britain spend very little time in port these days!

THE AUSTRALIAN NAVY AT WORK WITH THE BRITISH FLEET: There is no need to detail here the work of the Australian Navy; the story of the *Sydney* alone is sufficient to remind us of the valuable duties they are now performing. This picture, taken in home waters, shows a more humble unit—an Australian minesweeper, in her war-time guise. It will be noticed that the bridge of the vessel is well padded, as a protection against attack by aircraft and shell splinters. The Australians are collaborating in such dangerous duties as minesweeping as well as in more spectacular naval engagements



SICK SAILORS BEING PREPARED FOR TRANSFERENCE TO SHORE HOSPITALS: One of the problems of the Royal Navy is the transference of serious cases of sickness from warship to shore bases. Stretcher cases are invariably transferred to hospital in drifters which are attached to the Fleet for this purpose. These two pictures show how the work is carried out, by means of cradles

HOW CASES OF SICKNESS ARE DEALT WITH BY THE NAVY—A STRETCHER CASE BEING TRANSFERRED FROM A WARSHIP TO A DRIFTER

THE HISTORIC TEMPLE BOMBED

Still Another Famous Spot which has Suffered at Nazi Hands

THE EXTERIOR OF THE MIDDLE TEMPLE HALL, one of the historic buildings of London, as it now appears after a visitation from German raiding aircraft

REBUILT AFTER A DISASTROUS FIRE IN 1798 AND NOW AGAIN SEVERELY DAMAGED: Historic Pump Court in the Middle Temple after a German raid

Begun in 1562 and finished eleven years later, the Middle Temple Hall was the finest Elizabethan hall in existence. Surviving the perils of centuries, it has now succumbed—to German exponents of "Kultur." Some nights ago this ancient group of buildings was struck by a night raider's bombs, and suffered the damage shown in these pictures. A huge hole has been blown out of the masonry at one end of the Hall, completely destroying the richly carved wooden screen supporting the Minstrels Gallery erected in 1574. In addition, some of the fine old courts surrounding the Hall have also suffered—Pump Court, Brick Court, Elm Court and others

THE INTERIOR OF MIDDLE TEMPLE HALL WRECKED BY BOMBS: Built during the years 1562–72, this Hall witnessed the first performance of Shakespeare's "Twelfth Night" in 1601. Very few pictures have ever been taken of this celebrated spot: now it is in a sad state indeed!

WHERE RUSSIA FIGURES ON THE BALKAN CHESS-BOARD: Last week it was rumoured that Russia was massing divisions of troops in the Bessarabian territory, annexed by her from Rumania on June 28 of this year. The assembling of the divisions was described as "for manœuvre purposes"

The BALKANS in the AXIS GRIP

A Tense Situation Follows the Advance of German Troops into Rumania Over Hungarian Land

THE great desire of the Balkan States at the opening of the war against Germany was to remain neutral and to save their people from the horrors of war. But they could not settle their differences among themselves to form a united front against aggression. Great Britain tried to bring the States to understand that it was only by mutual agreement that permanent peace could be established, and Turkey made great efforts to bring about a union. Nothing, however, could persuade Hungary to abate her demand for the return of Transylvania; Bulgaria to yield concerning the Dobrudja; or Russia to relinquish her claim to Bessarabia.

Rumania, at the beginning of this year, appeared to be solidly behind King Carol, who was prepared to defend the frontiers of this greatly-enlarged country. The army was said to be ready to meet any aggression, while the great Ditch was made to hinder any sudden advance. No serious attempt was made to conciliate the aggrieved neighbouring states by any voluntary adjustment of difficulties, but all the time Germany was increasing her pressure upon the Rumanian Government.

In March, King Carol found it necessary to restore the Iron Guard, whose organisation he had broken up. It was announced as a necessity for the bringing about of national union. It was so obvious that Rumania might be attacked that the Allies begged the Government, via the B.B.C., not to delay in asking for help. This was on May 1, before Hitler's invasion of Holland and Belgium, and at that time there were large Allied forces in the Near East ready to prevent any attack upon Rumania. No response was made to the appeal.

After France had surrendered in June, Russia made her demand for Bessarabia and Bukovina, to which Rumania, with no friends now to help her, was obliged to yield.

On July 1, under Nazi insistence, the Anglo-French guarantee of her frontiers was officially renounced, and later in the month, Rumania sent representatives to pay a visit of respectful homage to Hitler.

August brought the Bulgarian claims to the forefront, and again Rumania had to submit, agreeing, on the 18th, to the surrender of the Dobrudja. The settlement was arranged without the use of force, and was one which Rumania would have been wise to have suggested herself, and so won the goodwill of the Bulgarians. She had seized the territory when Bulgaria was fighting Serbia and Greece.

Talks began with Hungary concerning Transylvania, but without success. Hungary wanted everything she had lost at Versailles. When the talks broke down both parties were summoned hurriedly to Vienna on August 28, where Hitler and Mussolini decided the matter for them. The delegates were not allowed the opportunity of putting forward their own views.

On August 30 Rumania gave way, submitting to the loss of more than half of Transylvania. In return she got the promise of the guarantee of her frontiers from both of the Axis powers.

September 1.—Italy described the Vienna award as a "triumph of justice, wisdom, and spirit of responsibility." The Rumanian Government tried to convince the people that Rumania, under the guarantee, would be able to "resume normal life at home and proceed to immediate demobilisation"—the only alternative being "to put in the scales the very existence of the Rumanian State."

September 2.—Soldiers had to surround the Palace in Bucharest. Rumania was warned that German troops might be sent to preserve order.

September 4.—King Carol appointed General Antonescu, who had previously been interned for intrigues, as Premier.

September 5.—By royal decree, King Carol resigned his dictatorial powers, but reserved certain rights.

September 6.—After an all-night consultation King Carol abdicated, leaving the throne to his son, Prince

(Continued on following page)

YUGOSLAVIA (FORMER SERBIA AND CROATIA) IN PROCESS OF BEING SURROUNDED BY AXIS INFLUENCE: Yugoslavia has been feeling the increasing grip of the Axis since the advance upon the Balkans. Rumania was being overrun with German troops; Hungary showed clear evidence that she was unable to prevent German troops marching across her territory; Albania, it is also obvious, is affected by Axis moves

WHERE THE GIANT DANUBE BEGINS TO FAN OUT AND FORM A DELTA: The river scenery in the Danube delta is often very attractive and boating parties are often to be seen threading their way through picturesque surroundings. For very many years now the control of the River Danube has been an urgent preoccupation with European statesmen. Now it looks as if Germany is to assume almost complete and undivided control of this very important trans-European highway

THE ADVANCE OF GERMANY INTO THE BALKANS: Last week witnessed an advance of German forces, both land and air, into Rumanian territory—ostensibly to guard the oil district from possible air attack. The land forces advanced right across Hungary unhindered. This movement brought Germany nearer to the possible theatre of action around the Black Sea

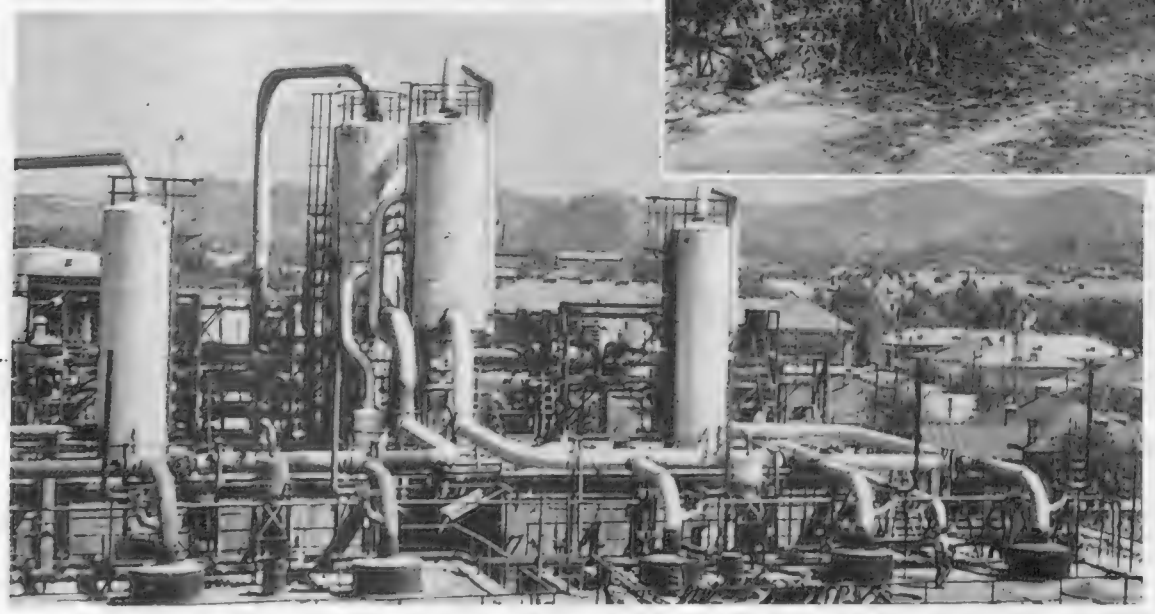
(Continued from preceding page)

Michael. He had been forced to this by the action of the Iron Guard, and the refusal of his own royal Guard to fire on the demonstrators demanding his abdication. Prince Michael took the oath to preserve the heritage of Rumania, her frontiers, and her integrity.

September 8. — Flags flying in Bucharest, where the Rumanians rejoiced at the accession of King Michael.

September 10.—General Antonescu announced that he was taking the title of State Leader.

PART OF THE "CAROL'S DYKE" DEFENCE LINE WHICH WAS NEVER PUT TO ANY USE: Early in the present year much was heard of a great Ditch and other linking defences which would be able to guard Rumania's north-western and north-eastern frontiers from invasion by any aggressor nation. It was hinted that it might be flooded with oil in an emergency. But nothing came of all this mighty preparation



TYPICAL SCENERY IN THE OIL-BEARING DISTRICTS OF RUMANIA

This is the foreground silhouette of a big section of Rumanian oil-bearing country north west of Ploesti. Low hills form the background and in between is the never-ending flow of trains specially designed to convey the oil from the refineries, of which this one situated at Campina is typical

September 11.—Iron Guard, who had been forbidden to wear green shirts, were now openly wearing them and growing in power.

September 14.—Princess Helen arrived in Bucharest, driving with her son, King Michael, through the streets.

September 15.—Antonescu announced new Government under the direction of the Iron Guard, now the only Party.

September 20.—Germany was appealed to by the Government to reorganise Rumania's army.

October 1.—Rumanian Government had arrested some British subjects connected with the oil companies, accusing them of intended sabotage.

October 8.—German troops on their way, fully mechanised.

GERMANY STRIDES (ACROSS HUNGARY) INTO THE BALKAN RING

October 10.—British subjects advised to leave Rumania.

October 11.—Rumania asks Axis for help against Hungary, where tension had arisen over financial arrangements. A.R.P. shelters being prepared, on German advice, and warehouses for large German equipment. German troops arriving in barges down the Danube, to occupy oilfields and ports.

October 12.—Twenty thousand Germans now in Rumania; 150 bombers and fighters flew over Bucharest; lorries filled with anti-aircraft guns reached the capital. Reports from Galatz say that 2,000 German troops are on the Danube.

October 13.—The Soviet Government officially informed of the German entry into Rumania. Soviet remained silent, but issued orders forbidding foreign vessels in the Black Sea. Many of the German troops marched through "neutral" Hungary.

October 14.—Italian Air Force officers have arrived in Bucharest to supervise the proposed seaplane base at Constanza.

On right—**CONSTANZA, THE FAMOUS RUMANIAN OIL PORT ON THE BLACK SEA:** The effective manner in which the oil feed-pipes are brought to these waiting ships shows the modern equipment of the port for the disposition of Rumanian oil products

A PICTORIAL PRESENTATION OF THE STATE OF TENSION EXISTING IN THE NEAR EAST

The advance of Germany into Rumania is a new factor in the Balkan situation which cannot be minimised. Yugoslavia, with possible pressure from Italy through Albania, quickly reacted and announced her intention to fight if necessary. Turkey soon made it clear that the way to the south and east as far as she was concerned would be blocked by 2,000,000 bayonets—and Turkey has the reputation of saying what she means, and not retreating from it! Any Napoleonic ambitions on the part of Germany's leader seem to be effectively checked at the moment owing to his lack of sea power, which the Italian Navy (no matter what Mussolini says) can never provide

PARIS Under the GERMAN RULE

Glimpses at the Once-brilliant Capital

THE PARIS THAT WAS: The gayest city in the world, where everyone sat on chairs on the Boulevard and watched the world go by. But now the throngs are gone—and only depression remains. Paris moves mournfully and tonelessly under the heel of the Conqueror

ACCURATE information of the condition of life in Paris since it has been occupied by the Germans has been very difficult to obtain as all news is strictly censored. It is only when some correspondent is able to get away to Lisbon that any understanding of the facts of the situation are revealed. Bit by bit a picture has been built up enabling one to visualise the changes which German occupation has brought about, and the attitude of the Parisians under their conquerors.

At first Paris was a dazed city. Everyone had expected the agony of severe bombardment, so that the sudden reversal of governmental orders to defend the city, the speedy evacuation by all those with sufficient money, left them stunned. The fact that there was to be no destruction of their loved city, and that the war had suddenly stopped, brought so much relief that the shame and dishonour of the armistice terms did not appear to be realised.

Ordinary life could be pursued in the early days. The housewife found the markets well supplied, the shops were open and full of goods and things seemed much as usual. True, the city was soon full of German troops, but they, having received special orders, were polite and anxious to prove that they had friendly feelings. The chief feeling, encouraged by the Germans, was of bitterness towards the British, who were accused of having let their Allies down.

The first great change, however, was soon apparent. The Germans promptly seized all petrol and lubricating oil, with the result that all private cars, cabs, and buses disappeared from the streets. Only the Metro remained for all means of transport, and that naturally became intolerably overcrowded. Cycles began to appear in great numbers, and even horse carriages were dug up from their oblivion. The only cars were those used by the Germans.

So apathetic had the Parisians become that the decrees issued at the end of June imposing the death penalty for any action against German authority, such as publishing anything harmful to the Reich, listening to non-German broadcasts, holding any anti-German meetings and such like, do not appear to have aroused any violent indignation. The public press became entirely controlled and poured out German propaganda. Posters on the walls also thrust right before the Parisians more propaganda against England, and the radio, placed under German control, reiterated the betrayal by England, and that the French capitulation must be accepted as complete and final.

One section of Paris, however, was feeling rather pleased. The shopkeepers were enjoying a "boom." All the Germans were well supplied with money, which they spent on buying cameras for themselves, silk stockings and fine lingerie for their wives. Art dealers found their goods eagerly acquired and sent off to Germany. In the first flush of this shopping activity it was scarcely realised that the payment received was really worthless. Good prices had been obtained quite easily, for the Germans found everything very cheap, having depreciated the franc by a special exchange valuation, and paying in German marks, of no value outside the Reich.

Throughout July and August the German troops remained on their best behaviour, even attracting some of the Parisian girls. There was much military music, constant parades of troops, and an ever-present hum of bombers overhead, flying very low, for no greater reason apparently than to let all Paris know what might have happened to them. There are said to be no less than 250,000 German troops in Paris, most of them enjoying leave in the one-time gay city. They are busy sightseeing, using their cameras vigorously. Napoleon's tomb is one of the favourite sights, together with Notre Dame and the Bois de Boulogne.

By the end of July, reports coming from those who had recently left Paris showed that food was becoming scarce. Such articles as milk, butter, eggs, coffee and tea and oil were very difficult to obtain, while sugar, bread and coal were rationed. Long queues stretched outside every food shop. The shortage was due partly to lack of transport, as the Germans control all means of communication, so that fruit and vegetables might be piled up at one place and unobtainable in Paris. But above all, the huge army of occupation, numbering 2,500,000, seize all available food, the cost of which is being paid for by France at 400,000,000 francs a day, about £2,250,000. The Vichy Government complacently comment that Germany has promised only to take the cereals needed for bread and part of the meat required, supplying the potatoes, sugar and other items from the Reich.

Shopkeepers have now become aware that the early "boom" was fatal to them. Their stocks have been exhausted, and no further supplies can be obtained; thus many of them have had to close. Hotels and restaurants apparently flourish, being patronised by the Germans, who enjoy the unwonted pleasure of consuming champagne in large quantities at small cost.

The greatest suffering caused to all the dwellers in Paris has been the impossibility of hearing from relatives and friends—there has been no communication whatever between occupied and unoccupied France, so that no one knows what has happened to their sons who had been in the army, or their relatives who had gone south. As a tremendous favour it has just been granted to the Vichy Government, in return for their "strong action" at Dakar, that a printed post-card with varying remarks, which can be crossed out if not apposite, can be sent across the frontier, where, it is said, 10,000,000 letters have accumulated.

As the months of German occupation have passed, life in Paris, though perhaps superficially normal, has become more and more grim. There is no gay life in the evenings, for a curfew sends everybody indoors by nine o'clock. The German soldiers themselves are not so confident of their final victory. The invasion of England predicted for August, and then almost certainly for September, has not yet eventuated, and now seems ever more and more difficult. Frenchwomen have been appearing with tricolour ribbons as buttonholes.

The decision not to defend the city may have spared the historic buildings, but the Parisians are finding that the price demanded for such security is bitter indeed.

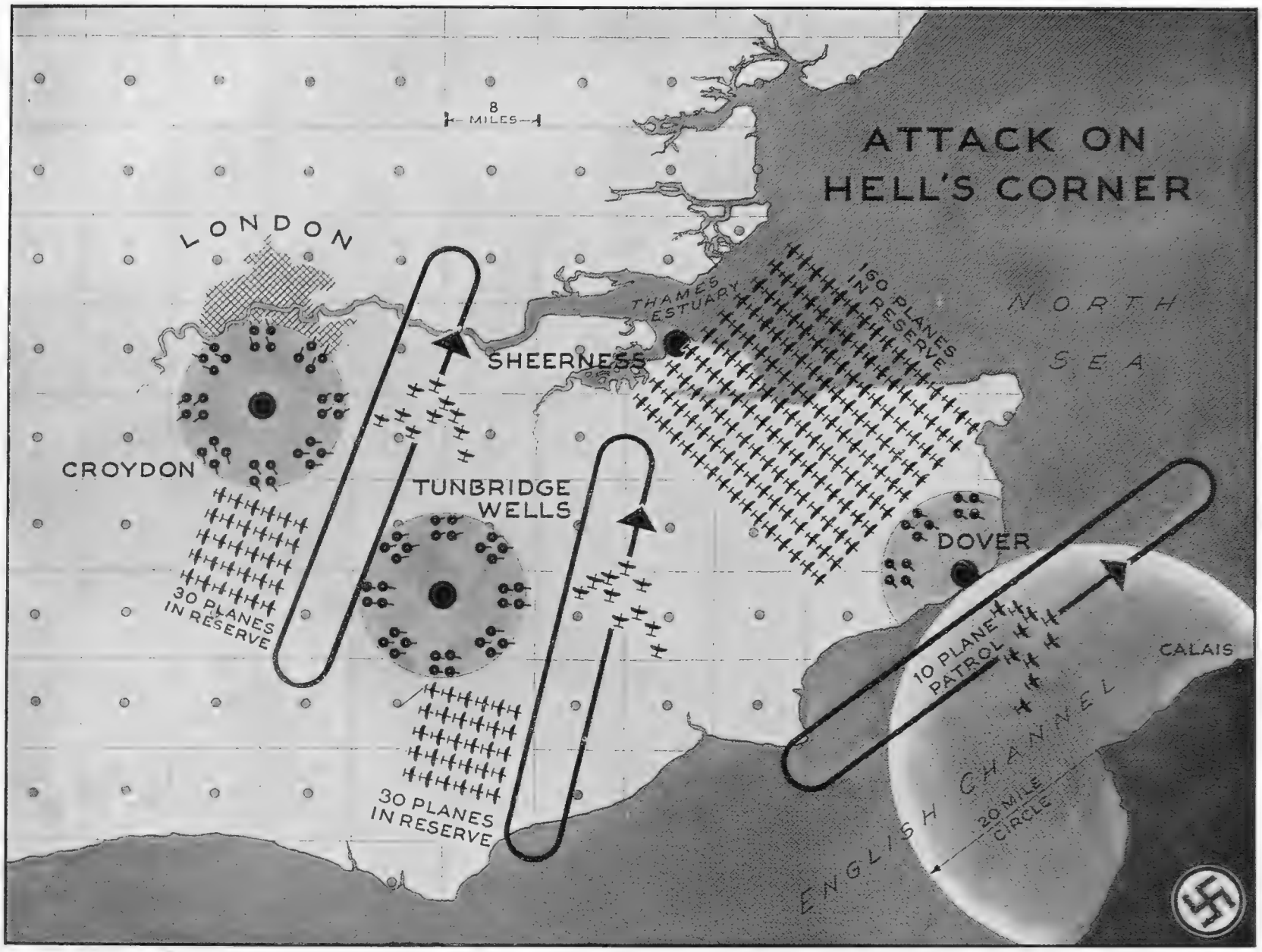
THE PARIS THAT IS

WEARY REFUGEES, who fled their once-gay city at the time of the great German advance, are now returning after aimless wanderings

MOTOR TRAFFIC FOR A TIME DISAPPEARED COMPLETELY: This is the Place de l'Opera, once the busiest thoroughfare in Paris!

A SOLITARY HANDCART AND TWO CYCLISTS IN ONE OF THE MAIN HIGHWAYS OF THE FRENCH CAPITAL

ONE OF THE PROBLEMS IN FRANCE TO-DAY: This is the Montlouis Bridge across the Loire River near Tours; it was destroyed during the retreat of the French Army. There are hundreds of such damaged bridges in France to-day, delaying communications



WHEN THE GERMANS ATTACK, THIS IS THE METHOD EMPLOYED BY THE R.A.F. TO BREAK UP AND DESTROY THE ENEMY'S FORMATIONS (*See notes below*)

MORE BATTLE TACTICS IN THE AIR

How the German "Luftwaffe" Try To Penetrate the British Defences at "Hell's Corner"

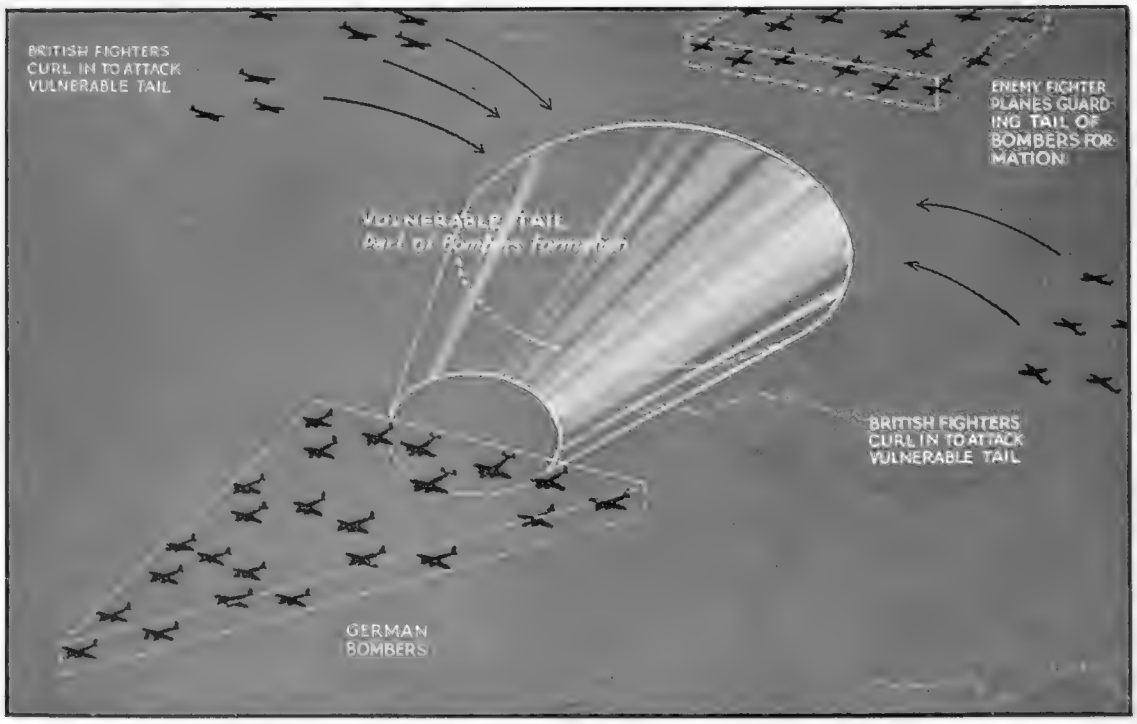
—A picture reproduced from the American magazine "Life"

"Hell's Corner" is the name given by American correspondents to the South-East section of England around Dover, where most of the enemy's air attacks begin. This diagram, taken from the American magazine *Life*, shows how the British air defence system is operated. The diagram is given in terms of three sample objectives; the area shown, however, has many other bases, including a great defensive ring around London. Large concentrations of planes like that at Dover are distributed among several fields, in fact, to make poorer targets for the enemy's bombers.

With every week of combat in the Battle of Britain, both sides are learning new lessons, devising new tactics in the science of mass air war. The diagram above shows one British strategy of defence as it has evolved under attack. In this South-East area air defence is a matter of minutes and seconds, so fast do modern aeroplanes fly and so quickly does attack mature. The whole section is marked off in 8-mile squares, with a listening post in each square.

A German air fleet leaving the coast of France takes only 6 mins. to reach the English coast. Since it takes a fighting plane about 10 mins. to reach 10,000 ft., planes on "ground alert" are not sufficient. When the heavy attacks began, the R.A.F. instituted a plan of constant "air alert" over important objectives, each with its ring of anti-aircraft guns. A squadron of planes circles back and forth, ready for instant action. For simplicity, the diagram shows only three objectives. Tunbridge Wells and Croydon each have ten planes on air alert with thirty more on the ground. Dover, on the coast, keeps the planes on a long patrol and has sixty on the ground. To disrupt the British defence, and to throw off the tenacious R.A.F. fighters, the Germans often make feints at several objectives before delivering the main assault.

The qualities demanded of modern air commanders are of a very high order, and the modern Air Force, with all its problems of organisation, service and supply, its multiple weapons and diverse tactics, is as complicated as any army. But in the Air Force everything must, of necessity, be calculated on a split-second basis.



BRITISH FIGHTERS VERSUS GERMAN BOMBERS: The new method of attack, by curling in on to the vulnerable tail. The duty of the enemy fighter escort is to keep the attackers away from this danger spot

On left—

The speed of modern planes is so great that fighters (which, it must be remembered, can only fire straight ahead) get little result by attacking from the side. If the bomber is flying at 250 m.p.h. the fighter could fire only three bullets per gun into it before it was out of range. Hence fighters usually attack from the rear, so that they can more than keep up with their prey. For best results the attack is made within a 40 deg. cone extending back from the bomber's tail. When the fighter attacks from the rear, he aims his whole plane at the target. The bombers carry guns in the nose and body, but in many cases the tail assemblage interferes with their rear field of fire, allowing the very vulnerable "cone" indicated in the diagram on the left. The fighters have great fire power but can carry only enough ammunition for about 30 secs. of steady firing, so that their gunnery must be good. To protect the vulnerable rear quarters of the bomber, the enemy often masses his fighters behind and above, ready to frustrate any attempt to bring down the bomber from behind

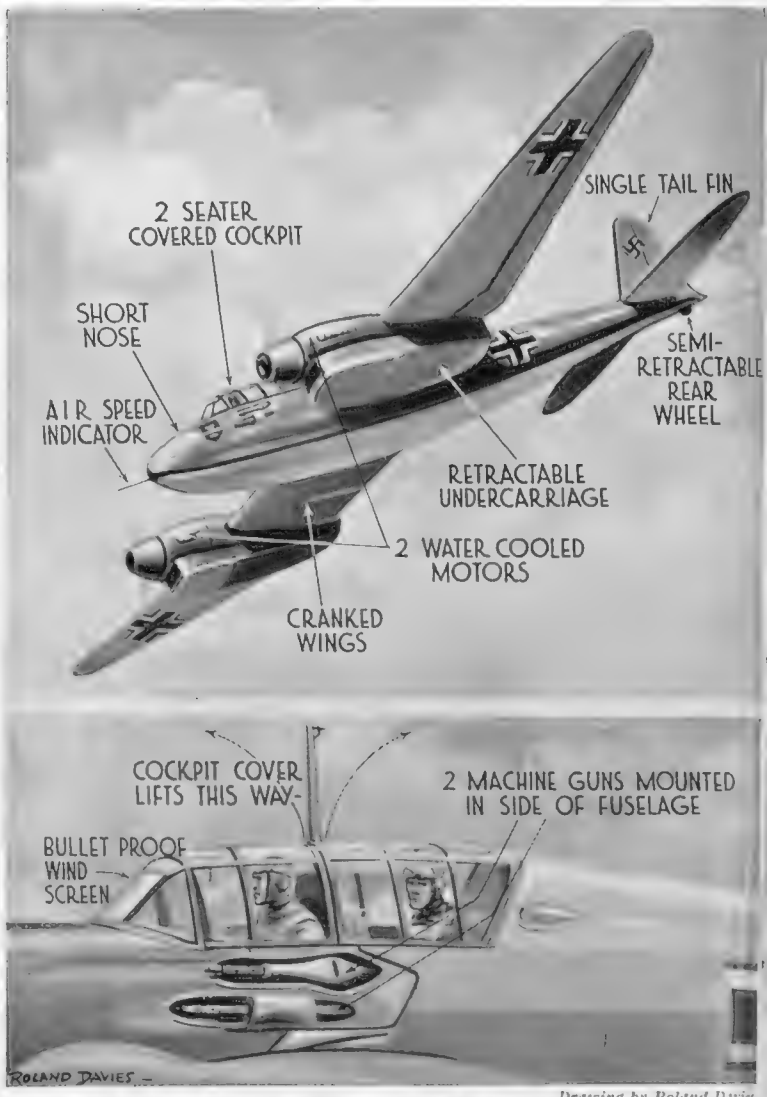
BRITAIN'S BOMB ATTACKS on GERMAN INDUSTRY

And Other Phases of the War in the Air Pictured in Drawings and Diagrams by "Sphere" Artists

Drawing by Marc Stone

"CEILING" IS BECOMING AN ALL-IMPORTANT FACTOR IN AIR WARFARE: HERE ARE THREE BRITISH TYPES, ALL OF WHICH HAVE A VERY HIGH "CEILING"

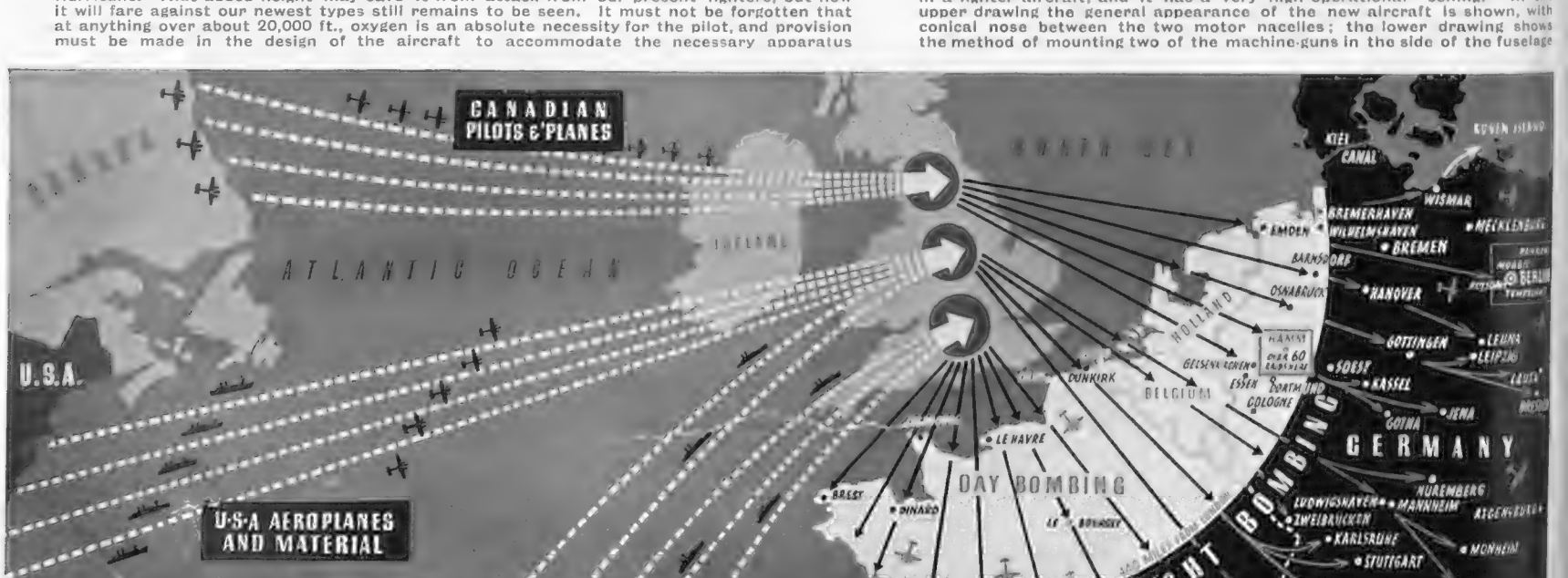
Stories have recently been current of a wonderful new German twin-engined fighter, the Focke-Wulf 187. But—the two principal factors in aerial warfare as it is being developed to-day are speed and "ceiling." And in these respects the F.W. 187 is certainly not very much better than already existing types in daily service with the R.A.F. Also, Britain has at least three new fighters coming into service soon which will be more than able to cope with Germany's latest, none of which, incidentally, has yet been met in the skies by the R.A.F. Further details of the F.W. 187 are given in the drawing on the right. Its chief merit must consist of its high ceiling: it is claimed that this is 38,940 ft., as against the existing ceiling of approximately 38,000 ft. for the Spitfire, 37,000 ft. for the Defiant and 34,000 ft. for the Hurricane. That added height may save it from attack from our present fighters, but how it will fare against our newest types still remains to be seen. It must not be forgotten that at anything over about 20,000 ft., oxygen is an absolute necessity for the pilot, and provision must be made in the design of the aircraft to accommodate the necessary apparatus



Drawing by Roland Davies

THE NEW GERMAN FIGHTER, THE FOCKE-WULF 187 (OPTIMISTICALLY TERMED THE ZERSTORER, OR DESTROYER)

This newest production of the *Luftwaffe* has still to make its actual appearance over Britain. Its production in large numbers must have been seriously hampered by the R.A.F., as it is being built in a factory at Bremen which has been receiving considerable attention from our bombers. The Destroyer is a two-seat, twin-engined fighter, for which a speed of 360 m.p.h. is claimed by Germany, although knowledgeable circles in London ascribe to it a speed in the neighbourhood of 325 m.p.h. What is astonishing about the new machine is that it has an unspecified number of forward firing guns mounted close together in the fuselage—a method which gives the machine practically no field of fire. Although there is thought to be one movable machine-gun firing aft, there is no under-gun position. This is a weakness which has already been made apparent in other German types. The British Defiant, comparable perhaps in speed to the new Destroyer, has several guns firing towards the rear which are also capable of being swivelled in a wide arc. Deflection fire from a Defiant's rear gunner would make short work of the new German fighter! The F.W. 187 has, however, a rapid rate of climb—always a very great advantage in a fighter aircraft, and it has a very high operational "ceiling." In the upper drawing the general appearance of the new aircraft is shown, with conical nose between the two motor nacelles; the lower drawing shows the method of mounting two of the machine-guns in the side of the fuselage



WITH A CONTINUOUS FLOW OF ARMAMENTS INTO GREAT BRITAIN, R.A.F. OPERATIONS ARE CARRYING THE WAR INTO GERMANY'S GREAT PRODUCTION CENTRES

The bombing operations carried out by the R.A.F. are not spasmodic efforts to terrorise the German people: every raid forms part of a considered plan to cripple Germany's war effort and to destroy the output of her industrial centres. Whilst these attacks continue by night and day, aeroplanes and other war materials are pouring into Great Britain from her overseas possessions and from the United States. It is by such methods that we can look forward to the future with a fair hope of ultimate success.

A WONDERFUL TARGET FOR THE R.A.F. IN MANY RAIDS: HAMBURG, SECOND CITY IN GERMANY AND FOURTH LARGEST PORT IN THE WORLD

This is the view looking south-east over the River Elbe: it shows the "perfect harbour" which has also become a perfect target for British bombers! It has a population of over 1,000,000 and, after London, Liverpool, and New York it was the most important commercial port in the world

WHERE BRITISH AIRCRAFT HAVE STRUCK AT THE VERY HEART OF GERMANY: THE BOMBING RAIDS IN THE RUHR AREA

This is a chart which tells with a deadly precision what the R.A.F. have done to the Ruhr up to the end of September last. Over this one area alone a vast web of destruction has been woven night after night by bombers who have struck at over 200 military targets. Every point selected has its place in a "Master Plan," even when its significance is not at first obvious: for example, although Germany has plenty of aluminium, we still bomb her aluminium plants to stop Hitler using the metal as a substitute for the copper he badly needs. It is believed that Germany's aircraft production and her power to replace machines brought down in this country have already been reduced appreciably by this bombing. And it is also known that such damage has been done to Germany's transport that her industries have often had their entire work interrupted. In the diagram above, the figures indicate the number of bombing raids which each individual spot has experienced in the course of one year of warfare

THIS IS A PORTION OF THE KRUPP WORKS AT ESSEN, TARGET OF MANY SMASHING BLOWS BY THE R.A.F.

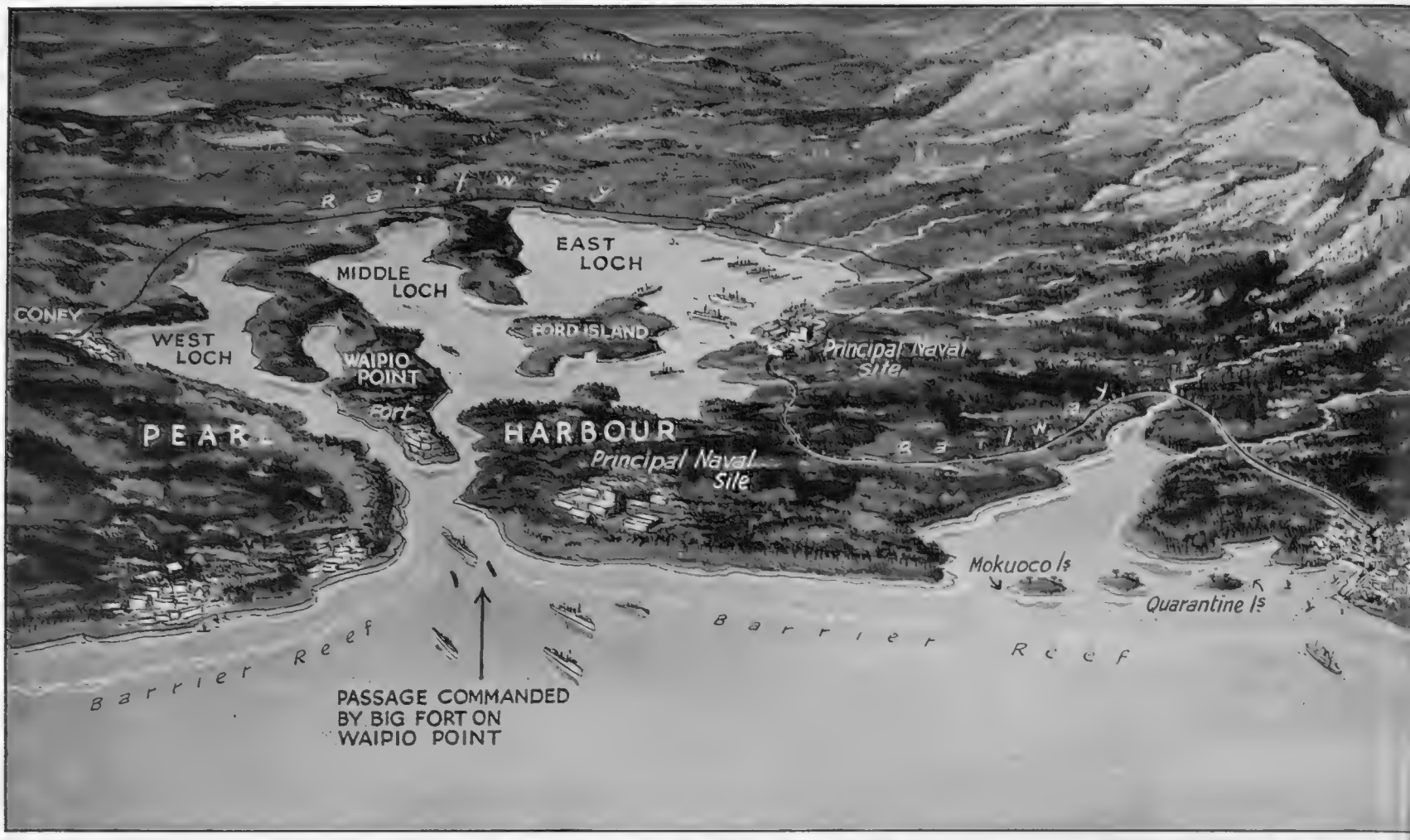
The famous works in the Ruhr form the largest armaments centre in the world. Raids by the R.A.F. on this nerve centre of the German nation have been continuous over a long period, and indescribable havoc has been caused there by our bombers. Before the last war 80,000 workpeople were employed at Krupps, but this number grew during the years 1914-18 to 115,000; doubtless, a similar number is being employed there now

Drawing by E. G. Lambert

"A GIANT'S KICK A MILE AND A HALF HIGH": AN INCIDENT DURING A RECENT NIGHT BOMBING ATTACK ON LE HAVRE

Blenheim aircraft of the Coastal Command recently carried out an attack on Le Havre Harbour, which lasted for 40 mins. and which rekindled fires which had been started the previous night by other British aircraft. One salvo of bombs burst fair and square on the target, and the ground became sheeted with white flame. "Then something volcanic seemed to happen," said one of the pilots who took part in these operations. "The concussion could be felt like a giant's kick a mile and a half high. At 8,000 ft. I thought my aircraft would be upset. We were in cloud at the time, but the sky around us suddenly became clear. The cloud, even at that height, had actually been blown away by the force of the explosion. Night became like day. I never saw such a fire before. Its brilliant reflection glowed in the clouds far above us. It warmed the cockles of our hearts"

THE HEART OF INDUSTRIAL GERMANY IN THE RUHR: A general view of the great Krupp Works at Essen, which is now one of the principal targets of the R.A.F. in their almost nightly raids on this tightly packed industrial area



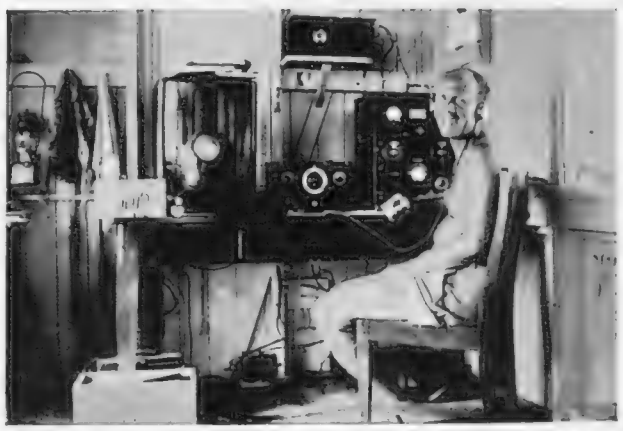
EVENTS in the Far East have naturally drawn attention anew to Pearl Harbour at Oahu Island, one of the Hawaiian group, where the United States Navy has its principal fortified naval base whose importance is obviously greatly increased by the recent turn of events. If Japan is to attack either the Californian coast or the Panama Canal, which is the main but not the only artery of the United States, a nearby base is essential, to be used in the same way that they used Dalny for the attack on Port Arthur, as the nearest point of the Japanese coast is nearly 8,000 miles from the Pacific end of the canal. Mexico and the other Central American republics have all been carefully examined for this possibility, but a well-equipped port or a very big protected bay is necessary, two attributes of Hawaii; in any circumstances it is doubtful whether the Japanese would attempt any large-scale trans-Pacific operations unless they could capture this base, which the Americans regard as impregnable.

Pearl Harbour is 3,379 miles from Yokohama, and on the other side 2,436 from Victoria, British Columbia; 2,100 from San Francisco; 4,685 from the Panama Canal, and 2,037 from Dutch Harbour, the base which the Americans are developing in the Aleutian Islands in the Far North. Altogether the Hawaiian Islands have an area of 6,449 square miles, but there are a large number of them and the bulk of the population is centred on Oahu Island, which contains both Honolulu and Pearl Harbour. The numerous islands surrounding the base are admitted to be a source of weakness if they cannot be securely held against an enemy.

America's first interest in the islands was through its whalers, which went round the Horn from the New England coast to work the North Pacific fisheries and used the Hawaiian Islands not only for obtaining water and other stores but also for finding very useful native hands, as described in *Moby Dick*. The missionaries began to arrive in 1820 and found most of the islanders very eager for their teaching. Traders followed them and in 1854 the first Treaty of Annexation was agreed upon at the instance of the islanders themselves. The Americans then had plenty on hand in their own territory, with the Indians still dangerous, and nothing was done. Some years afterwards a succession of civil wars occurred between the native king, who desired absolute government, and the majority of his people, who wanted a constitution. These became so serious in 1893 that the United States Navy had to land bluejackets and marines to protect American lives, and Washington was again asked to annex the islands.

Admiral Mahan, the great authority on naval strategy, was one of the keenest advocates of this course, for he maintained that the United States would soon want a big base in the Pacific, and Hawaii was ideal. Unfortunately the offer was made about election time, and as the opposition suggested that it had been made under the pressure of the American landing it was decided that it was too dangerous, politically, to accept, and another period of trouble ensued, when an attempt was made to rule the islands as a republic, which was ruined by corruption. President McKinley resumed the negotiations in 1897 and the transfer was finally made in August, 1898

In spite of the arguments of Mahan, there was at first no great enthusiasm to utilise the acquisition for naval purposes. The Japanese Navy had proved itself in the war with China, but its victory was an easy one and it was not yet taken very seriously even in Asia, far less on the other side of the Pacific. The United States Navy was regarded as essentially a coast defence fleet and although



A LONELY BRITISH WIRELESS POST ON CANTON ISLAND: This typical little Pacific atoll lies 2,000 miles south of Hawaii in the Phœnix group; the lagoon enclosed by the island is 8 miles wide and 3 miles long. The station links up a great number of the British island possessions

THE UNITED STATES ADVANCED NAVAL BASE IN THE PACIFIC: A BIRD'S-EYE VIEW OF PEARL HARBOUR AT OAHU ISLAND, ONE OF THE HAWAIIAN GROUP: This is the main United States naval base in the Pacific; it is 2,098 miles from San Francisco, 3,380 miles from Tokyo, and 4,859 miles from Manila. Pearl Harbour has been mightily fortified by the United States and is the only base west of San Diego where the main Fleet could be sheltered, fuelled and repaired in war-time. Distances in the Pacific are colossal, and if the United States were to fight an offensive war, her Navy would have to cover thousands of miles with a Fleet whose practicable battle radius (with due allowance for the return voyage) is 2,500 to 2,700 miles from its base. Pearl Harbour in the Hawaiian Islands is the hinge of present United States naval strategy; the entrance to it, as shown in the above drawing, is through a break in a long reef; it admits to a harbour big enough to float a very large Fleet

WHERE THE LONGEST DUPLICATE CABLE IN THE WORLD COMES TO THE SURFACE AT FANNING ISLAND: This is one of the Gilbert group; it is of importance by reason of its position in regard to the Empire cable system which crosses the Pacific. The cables are carried at great depths, sometimes as much as 3½ miles. This view shows an Islander spearing fish in the lagoon

THE DEFENCE of the PACIFIC: Where the U.S.A. has an Advanced Line Far Out in the Great Island-studded Ocean

the natural resources of the islands made them a very desirable possession from the commercial viewpoint, the idea of a naval base far offshore did not appeal to the majority of American naval officers. They were only too anxious to rid themselves of the bases they had taken from Spain.

In those days, it must be remembered, the ordinary officer's conception of naval warfare was very different from the accepted principles of to-day, taught by experience in the late war with Germany, and the only possible site for a naval base appeared to be at Honolulu itself, situated on the banks of a small bay which could not be easily protected and which would only accommodate a few ships. Even Admiral Robley (Fighting Bob) Evans considered that the base would be useless and the military possession of the islands a source of weakness in war-time. One of the greatest disadvantages of Honolulu appeared to be the absence of high land to give the guns of that day the cherished "commanding position," and the Navy was more anxious to spend all the money available in improving and fortifying the Philippine Islands, which had been taken from Spain, while the Army insisted that the Hawaiian Islands were much more important and possessed greater possibilities.

During the next few years the changed position in the Pacific, and the rapid growth in the size of battleships, coupled with the increasing complexity of their needs, caused the more careful consideration of Pearl Harbour, a huge stretch of landlocked water, about ten miles to the west of Honolulu. This had been regarded as unsuitable, for although there were from 8 to 20 fathoms of water inside, the mouth was blocked by a formidable coral reef which prevented anything bigger than small craft entering.

(Continued on following page)

WHERE THE AUSTRALIAN AND NEW ZEALAND CABLES DIVERGE: From Norfolk Island, almost South of New Caledonia (and not shown in the map below), the trans-Pacific cables from far-off Canada (one of the longest cables in the world) diverge to Australia and New Zealand. The little island town of Kingston on Norfolk Island, seen above, is most pleasantly situated

Y POINTS IN THE UNPACIFIC PACIFIC WHICH HAVE NOW BECOME OF GREAT STRATEGIC IMPORTANCE: The vast space of the Pacific Ocean is dotted with small islands. These are mainly cable stations, wireless stations or flying bases for the Pacific Clippers. Midway Island, Fanning Island, Wake Island, Guam and many another have a significance to-day which was undreamed of a few decades ago. The whole problem of the Pacific, so far as the United States Navy is concerned, is one of distance. The United States Fleet would have to range thousands of miles in the event of war; hence the necessity for ensuring the safety of these far-flung outposts set in the midst of the wide seas. Pearl Harbour is in the Hawaiian group to the East of Honolulu. It is here that the United States of America has its advanced Base

STRATEGIC POINTS PACIFIC

A careful survey of the coral reef which blocks the entrance showed that there was, in a position ideally situated for defence, a short stretch where the coral was replaced by sand.

In 1903 work was started to dredge this sand and to cut back the adjacent coral until there was a first-class channel 1,500 ft. long and 250 ft. wide, the only means by which ships can get into the base, and completely dominated by wonderful defences including the huge Malakiki fort.

It was not easy to get the necessary money out of Congress but it came by degrees and in 1909 Pearl Harbour was chosen as the principal United States naval base in the Pacific and a contract was signed for the construction of what was then to be the biggest dry dock in the world, over 1,000 ft. long. Unfortunately, before it was completed, this work caved in owing to the pressure of water under it forcing up the bottom, but a new one was immediately constructed on safer lines and this was opened in 1919, when the stronger part of the United States Fleet was transferred to the Pacific and arrangements were made for constant exercises with the Atlantic section. At that time the Pearl Island base was not developed but work proceeded steadily and the whole area was wonderfully defended with numerous guns ranging from 14-in. coast defence pieces and huge mortars downwards. It is worth noting that the Army engineers paid just as much attention to the land as to the sea side of these fortifications, fully realising the danger of adjacent

THE ADMINISTRATOR'S OFFICE AT KIETA, BOUGAINVILLE: The Solomon Islands group was taken over by the Australian Government in the last war, the British Administrator having to win over the natives owing to the harsh treatment they had received from their former German rulers

WAKE ISLAND LIES 5,000 MILES FROM THE AMERICAN COAST: Geographically it is extremely remote; but it is in regular touch with the outer world owing to the service of the Pan-American flying-boats, which stop here and refit and refuel on their way to their Asiatic ports of call. The island is barely a mile long, is crowded with bird life and is visited by travellers who are attracted by the charm of its remoteness

(Continued from preceding page)

It was big enough to accommodate any fleet in comfort and in many ways might be compared with Scapa Flow, while it was divided up after the fashion of Malta.

The West Loch, the least promising, is separated from the others by a large peninsula whose end, Waipio Point, juts straight out into the narrow channel which leads into the open sea.

The Middle Loch lies back to the northward and is divided from the big East Loch, where most of the United States Navy's activity is centred, by a peninsula which contains the principal town. The East Loch is as big as the other two put together but it is divided by Ford Island. Most of the naval land lies to the east and south of the East Loch and to the east of the entrance channel.

AN ISLAND HOTEL IN THE MIDST OF THE PACIFIC sand: there are many bushy stretches in the hotel on modern lines where air passengers rest Another island in the little group

IN WAKE ISLAND'S COMFORTABLE HOTEL, THOUSANDS OF MILES OUT IN THE LONELY PACIFIC

Modern methods of travel have brought into being up-to-date hotels in many otherwise extremely remote places. But the hotel on Wake Island outdoes them all in remoteness. It is no less than 2,400 miles from Honolulu and 5,000 miles from the United States!

ISLAND in the OCEAN

islands falling into enemy hands.

The very large Japanese population of the Hawaiian Islands is a serious potential danger. In 1922 the American authorities became very seriously concerned at the growth of the Japanese population in spite of all precautions and agreements and a commission of investigation recommended strong legislation to control its proportions.

One of the most obviously dangerous factors in the Japanese element was that it remained absolutely Japanese in every particular. Thousands of women—"picture brides" they were called — were shipped across from Japan and there was very little intermarriage with the native Hawaiians while, under the pretext that they were teaching the Buddhist religion, Japanese national schools were established and educated the settlers' children without any risk of their being "Americanised" or learning democratic principles. In addition to the labour in the sugar fields the Japanese have a practical monopoly of the fishing industry and it gives employment to hundreds of "sampans" which are very different from the small sampans on the Chinese rivers and which are mostly fine up-to-date vessels with powerful diesel engines and very good speed, the type of vessel which would be invaluable for collecting forces in the outlying islands to support an enemy attack. In the course of their fishing operations their captains, who are all members of the Imperial Japanese Naval Reserve, have learned to know the intricate passages between the islands very well.

In one very important respect, however, the Japanese danger has very greatly declined during the last few years. Not so very long ago they had great success in their efforts to stir up native Hawaiian feeling against the Americans on all sorts of imaginary grievances. This did not assume proportions beyond the pin-prick stage, but it was very annoying and was particularly directed against the Navy and Army. While the Japanese have taken the greatest pains to maintain purity of race, importing their wives in the manner already described, the Chinese labourers have inter-married very extensively with the Hawaiians and the result has been that Japanese aggression in China has aroused a very bitter feeling against them among the Hawaiians, who would now do anything rather than associate with the Japanese in any way.

Pearl Harbour, like Singapore, was specially exempted from the restrictions on naval bases contained in the Washington Disarmament Treaty, although American plans for strengthening Guam and the Philippines had to be abandoned in order to secure Japanese support for the principal suggestions. The work has, therefore, proceeded steadily until now it is one of the finest defended bases in the whole world. During the last few years the greater part of the United States Battle Fleet has generally been in the Pacific and often concentrated in Pearl Harbour, while there are powerful permanent formations of destroyers and submarines, including some of the biggest in the United States Navy. First-class accommodation has also been built for a very large number of aircraft, and the shore defences are manned by a big military garrison.

GOONEY BIRDS, GULLS AND RARE SPECIES INHABIT THE WAKE ISLAND GROUP: The tiny little islands, lonely as regards human beings, are alive with the cries of sea birds. From flat stretches of scrub-covered sand rise clouds of birds as the visitors penetrate into their undisturbed haunts

OCEAN: Wake Island is not all bare midst of which has been constructed an during the flight from America to Asia. appears in the distance

SUVA, IN THE FIJI ISLANDS, IS AN IMPORTANT RELAY STATION: Several trans-Pacific cables touch Suva, in the Fiji group; the island serves as a relay station for passing on the messages which arrive at Suva in a necessarily weakened condition. The natives use these traditional catamarans with outrigger floats when fishing in the lagoons

THE ONLY STREET ON WAKE ISLAND IS A BOARD WALK

Guests are returning from a constitutional and are tramping up the board walk past the offices to the hotel itself. There is a car in which one can bump round the island—it gives one a sense of motion, if not much else; because, after all, the island is only 1 mile long!

THE AIRCRAFT-CARRIER "FURIOUS" AS THE PILOT SEES IT FROM THE AIR: Recent events in the Mediterranean have proved the great value of these floating aerodromes. The British Navy is the possessor of many such, and is now employing them to valuable advantage. H.M.S. *Furious*, pictured above, is one of the earliest of the carriers: she was originally intended as a cruiser, but was rebuilt in the winter of 1917-18 for her present purpose. Since her conversion she is good for 32-33 knots, as a good turn of speed is essential in an aircraft-carrier: including the cost of alterations, this ship is said to have absorbed over £6,000,000. Her official complement of aircraft is thirty-three; and there are two hydraulic lifts from the hangars to the flight deck

The AIRCRAFT-CARRIER

Craft which are Proving their Worth in the Mediterranean

THE PILOT LANDING ON THE DECK OF A CARRIER MUST BE ASSISTED ABOARD: When coming in to land on the deck of a carrier the pilot has many strange things to contend with—the lift of the ship itself, the strange and complex air eddies, the shortness of the deck, etc. To assist him, an officer stands on the flying deck with two discs: when height, approach and speed are correct, he signals accordingly, as shown above. The pilot then closes his throttle and glides in to touch down at the correct spot; his landing run is then checked by the arrester wires stretched across the flight deck

AFTER ITS PATROL, THE FAIREY SWORDFISH IS LOWERED DOWN THE AFT LIFT WELL: Great numbers of aircraft are stored in the carriers, but only because the wings of the aeroplanes fold up, thus allowing them to be stored within a very small space in the capacious hangars below, which are reached by lift. This necessity for aeroplanes with folding wings has caused aircraft designers many headaches! Because of this fact, undercarriages (which must of course consist of wheels, as the aircraft lands on the deck and not on the water) cannot be retracted; consequently the performance of the planes of the Fleet Air Arm cannot have the speed of Spitfires or Hurricanes; and there are other technical difficulties, too. Nevertheless, the Fleet Air Arm have done a wonderful work in Norway, and are now doing the same in the Mediterranean where their work is fully appreciated by the Royal Navy

THE GROWTH OF THE HOME FLEET

How Britain's Mighty First Line of Defence Came Into Being

By FRANK C. BOWEN

CONSIDERING that the defence of Britain is the main purpose of the Navy, and that the Home Fleet is the "sure shield" of the country, it is curious that the name, which seems so appropriate, has only found occasional favour and not always with material to give it the best of reputations. It was not, in fact, until the present century that the Navy knew it at all; until then the ships in home waters had generally been known as the "Channel Squadron," with a cruising ground that took them far afield, or occasionally as the "Grand Fleet."

The "Home Fleet" came into existence during the period of general reform which was really the beginning of the modern Navy. The Home Squadron consisted of a few second-line sea-going ships in reserve (a Rear-Admiral flying his flag in the *Empress of India*), and on mobilisation the portguard ships, which normally swung round their anchors in harbour year in and year out, joined them. They made a heterogeneous collection of old battleships and belted cruisers, protected cruisers built under the Naval Defence Act, and torpedo gunboats, with twenty-two coastguard tenders, both steam and sail, attached to them.

When the reserve and coastguard ships were called out, the Admiral Commanding Reserves, who was a Vice-Admiral, left his office in London and hoisted his flag in the battleship *Revenge*, and the squadron became the Home Fleet. In addition, a number of what the Admiralty called "Sea-going Ships on Home Service" were attached to the Home Fleet on mobilisation—old ships, destroyers, etc., which were mostly employed on training work at Sheerness, Chatham, Portsmouth, Devonport and Queenstown.

This fleet was not regarded as the country's first line of defence against invasion; that was the Channel Squadron. In 1903, however, it was decided that a better second line was needed. "Jackie" Fisher wanted to weed out all the ships which could neither fight nor run away, and which would be death-traps in action, so that the Home Fleet was established as a proper fleet with headquarters at Portland.

The Admiral Commanding Reserves was relieved of all sea-going work, it being considered that he had plenty to do in his own job, and a Vice-Admiral was appointed to the Home Fleet with his flag in the *Revenge*. This fleet then consisted of four semi-obsolete battleships of her type, four still older battleships, three old cruisers and two reasonably modern ones.

The command was given to the famous Vice-Admiral A. K. Wilson, who had won his Victoria Cross when he held the square at El Teb with his fists, and he never deserved the bluejackets' nickname "Old 'Ard 'Eart" as well as he did in that command. He had to weld a collection of ships of miscellaneous design, which had never done much sea time or manœuvring together and which were joined by a number of mixed coastguard ships three times a year for exercises, into a fighting squadron and that was a job which could not be done with kid gloves. It meant working night and day at a time when the greater part of the Navy had not recovered from the holiday atmosphere of the Victorian period.

Nobody enjoyed the task much, but the work was so well done that in 1905 the Home Fleet, reinforced by more modern ships which had been brought in from the Mediterranean and elsewhere, became the Channel Fleet and a worthy first line of defence.

The name Home Fleet was not at first given to the remnants, which were called "the Fleet in Commission in Reserve at Home" and which were divided into divisions at the Nore, Portsmouth and Devonport with a Rear-Admiral in command of each. Fisher was determined not to allow the Reserve to get into its old bad condition, when the ships could not be relied upon for weeks, but had every ship worth keeping thoroughly overhauled, many in private yards as the dockyards were overworked, and made them put in much more sea and training time.

There were not officers and men enough for all of them, so what was called the Nucleus Crew system was introduced, whereby the ship had the necessary officers, petty officers and key ratings on board, who could get to know her thoroughly and keep her in good condition and who were to be reinforced by pensioners and reservists should war break out. There was a good deal of criticism of this system at the time, but the condition of ships and men rapidly improved and after two years the time was ripe for another reorganisation which made the Home Fleet a very serious striking force.

In 1907 there were sufficient men to keep the Nore Division, based on Sheerness and Chatham, in full commission. The Fleet flagship was to be the new *Dreadnought*, the wonder ship of her time which revolutionised naval architecture, as soon as she was ready. With her there were five battleships and four cruisers, while the Fifth Cruiser Squadron which was attached consisted of five modern armoured cruisers.

With nucleus crews the Portsmouth Division consisted of four battleships and ten armoured and protected cruisers, whilst the Devonport Division was made up of three battleships and eight cruisers. That was only intended to be an intermediate stage; as the new ships of the Dreadnought class were completed they were drafted into the Home Fleet with all the newer battleships; and the Channel Fleet then no longer existed.

When war broke out in August, 1914, the Home Fleet was the first line. The First Fleet consisted of four battle squadrons, Dreadnoughts, semi-Dreadnoughts, and eight of the latest pre-Dreadnought battleships with light cruisers and destroyers attached. There was a squadron of four battle cruisers, two more squadrons of four armoured cruisers, one of four armoured and one light cruiser and one of four light cruisers, in addition to seventy-five destroyers with their cruiser leaders and depot ships, divided into four fleet flotillas.

The Second Fleet consisted of two battle squadrons of older ships, with light cruisers attached, two cruiser squadrons, a minelaying squadron of converted cruisers, practically all the available submarines, and a number of destroyers both old and new.

The Third Fleet, or the "Baltic Fleet" as the Navy called it in memory of Rozhdestvensky's famous Russian force, consisted of old battleships, armoured cruisers, protected cruisers and small craft which had only nucleus crews at the outbreak of war and made them up in the manner originally planned by Fisher. The *Cressy* and her sisters, which were torpedoed off the Dutch coast early in the war, belonged to this formation, and their casualties included a large number of coastguards, pensioners and Naval reservists generally.

When war broke out the Home Fleet disappeared into the northern mists, was joined by various other units and became the Grand Fleet, the old name disappearing again. It was revived for a time when the Grand Fleet was officially dispersed in April, 1919, the newer ships becoming the Atlantic Fleet while the Home Fleet was made up of the older ships which were not required in the Mediterranean or on the more distant stations, and most of which were already earmarked for the scrappers.

In 1932 the Atlantic Fleet was renamed the Home Fleet, as being more in keeping with its duties and certainly more popular with its personnel, and although it was the country's first line it was a very attenuated one for some years. It included some of the biggest ships but not by any means all of them and it was constantly weakened by units being taken into dockyards for modernisation and reconstruction.

At the time of the Abyssinian trouble most of the units of the Home Fleet were sent to the Eastern Mediterranean as a backing to the League of Nations' Sanctions policy, but as the League was not unanimous and most of the signatory powers withdrew when it came to the point, their presence did little more than act as an irritant to Italy and cause offence; Italy cherished her grievances until the time came when she saw the opportunity of acting as jackal to Hitler. After that the growing power of Germany, and the obvious danger to European peace, caused a steady strengthening of the Home Fleet until it was a very powerful force again.

When war broke out it disappeared into the mists just as its predecessor had done in 1914, but this time there was no question of rechristening it the Grand Fleet, although the suggestion was made. The name Home Fleet describes its function perfectly; it has been reinforced by an unknown number of new and old ships and, from being a miscellaneous collection of old vessels which Wilson had to knock into shape, it has become the world's foremost naval force, enjoying the unique distinction of being commanded by an Admiral of the Fleet flying the Union Jack at the masthead, a thing which was formerly only done when an officer of that rank, whose active naval days were normally finished, went to sea on a special mission—which did not last for very long.

A "CHANNEL POLICEMAN" RETURNS FROM ITS DAILY TASK OF WATCH AND WARD: This Channel patrol vessel is returning to its port in the grey light of dawn after a night's work at sea. These vessels are known to the Navy as "Channel policemen," for their work is to spot and destroy mines, watch and guard Convoys and maintain a submarine surveillance patrol. The British Navy is very well supplied with small vessels of this nature, all designed for different and special duties

The WORK of the ROYAL NAVY

Guarding the Shores of Britain and in Mediterranean Waters

On left—

A DESTROYER FLOTILLA IN HEAVY WEATHER AROUND THE BRITISH SHORES

Drawing by Montague Dawson

Now that we are approaching the rougher weather of winter, there will be heavier going for our destroyer flotillas around Britain. In the North Sea, in the Channel, off the Scottish Coasts, and even farther out at sea, the patrols will continue, however, for it is in rough seas that the British Navy has established its high reputation. Our destroyers—first line of defence—are not comfortable vessels in high seas; but our crews know their vagaries, and the ceaseless watch will continue by day and by night, in foul weather as in fair.

The destroyer as we know it to-day first came into being with the launching of the *Havock* at Poplar in 1893. The type at once proved so successful that in a very short time the construction of torpedo boats (so seriously threatened by this newest type designed solely for their destruction) was almost completely abandoned. With the passage of time the destroyer has been developed until it now fulfils a variety of functions and has come to be known as the "Handmaiden of the Navy."

In the British Navy destroyers are usually organised into Flotillas, at the head of which is a Captain or Commodore.

On left—

BRITISH DESTROYERS LAYING DOWN A SMOKE SCREEN IN THE MEDITERRANEAN

In warfare for many scores of years, a principal desire on the part of the opposing forces has been to conceal their plans and manœuvres from the enemy. Hence the development of the smoke screen: at sea, especially, is it important to screen an offensive grouping, so that the enemy will not know from which direction the attack is coming. The use of a similar screen for defensive purposes, or for retreat, has naturally and inevitably followed. In the war of 1914–18, destroyers were provided with special burners for phosphorus on the after deck, and means for injecting chloro-sulphuric acid into the funnels. These chemicals produced a dense white mist hanging low on the water and the vessels steaming rapidly could quickly lay a screen behind which other warships could manœuvre or a Convoy of merchantmen remain hidden. There have been many cases of the employment of smoke screens in actual naval engagements, chief of which were the blocking of the harbours at Zeebrugge and Ostend during the last war.

On right—

BRITISH AEROPLANE VERSUS GERMAN SUBMARINE: The destruction of a U-boat by a Sunderland aircraft in the Atlantic

Drawing by Montague Dawson

During recent operations in the Atlantic, a huge Sunderland belonging to the Coastal Command of the R.A.F. attacked and sank an enemy submarine which had previously made a torpedo attack on a merchant ship in the darkness. As dawn came the Sunderland was searching for the U-boat. The second pilot spotted the conning-tower, but when the aircraft reached the spot it had completely disappeared. Nevertheless, the Sunderland let go a salvo; apparently the bombs had got just under the submarine before they went off. "It was terrific," said the flying boat's captain. "The surface of the sea seemed to shudder for yards around, and then suddenly blew up—whoomph! In the middle of all the foam the submarine was lying tilted over a little, with its decks awash. It sank again, but we dropped another salvo plumb in the middle of the patch of foam. Up came the U-boat once more, but this time it rocketed out of the water at such an angle that we could see daylight between it and the sea. It seemed to stay poised for a moment. Then slowly it went down. I dropped a third salvo. Huge air bubbles came rushing up—one was a good 30 ft. across. Then came masses of oil. It was over in a minute and a half."

ITEMS OF WAR NEWS

THE UNITED STATES AMBASSADOR SAYS GOOD-BYE TO No. 10: Mr. Joseph Kennedy is leaving England for Washington very shortly, and a new Ambassador will be appointed in his stead by the U.S.A. Mr. Kennedy, a close friend of this country, has reached the end of his term. Here he is seen chatting with Capt. D. Margesson, Chief Whip, outside No. 10 Downing Street after his leave taking of the Premier. Capt. Margesson is the Organiser and Controller of the Conservative Party machine

SAILOR ON HORSEBACK; £500,000 FROM MANCHESTER FOR "WAR WEAPONS WEEK": Manchester's "Week" was given a great fillip a few days ago when 300 men, forming a Naval Contingent, marched through the streets of the City. Two cheques, each for £250,000, were handed over during the progress of the march—one from the Co-operative Insurance Society, and the other from the Refuge Assurance Company. In this picture Commander W. A. C. Dickinson, the Sailor on Horseback, is seen receiving a Scroll and one of the cheques from Mr. W. J. Sutton, Vice-Chairman of the Co-operative Insurance Society

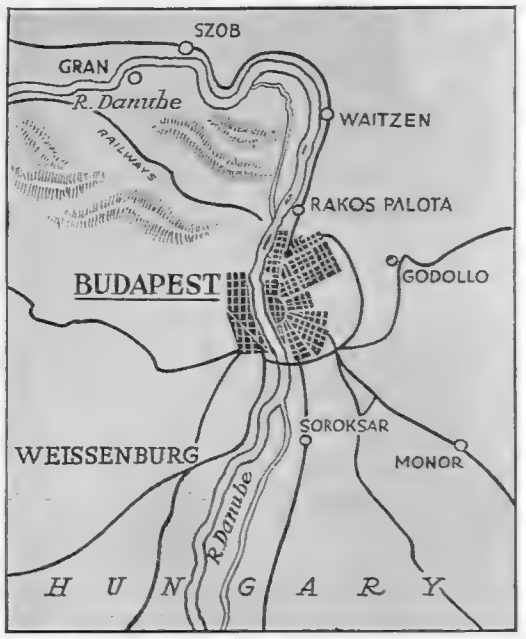
RESULT OF A TIME BOMB—A SCENE IN CENTRAL LONDON: When this business woman arrived at her office in the morning she found the building threatened by an unexploded time bomb. Typewriter and dictaphone were both salvaged; and whilst awaiting transport to new quarters, she continued with urgent letters on the pavement outside her former home

THE STAINED-GLASS WINDOWS OF CANTERBURY CATHEDRAL: Thousands of small panes of glass in the windows of Canterbury Cathedral have been shattered by the bombs of enemy aeroplanes. Fortunately, however, most of the really unique, centuries old, stained glass—known to visitors from all over the world—had previously been removed to a place of safety. Nevertheless, there are many other windows which now need expert attention. This picture was taken high above the Choir, and shows a stained glass expert attending to some of the damage

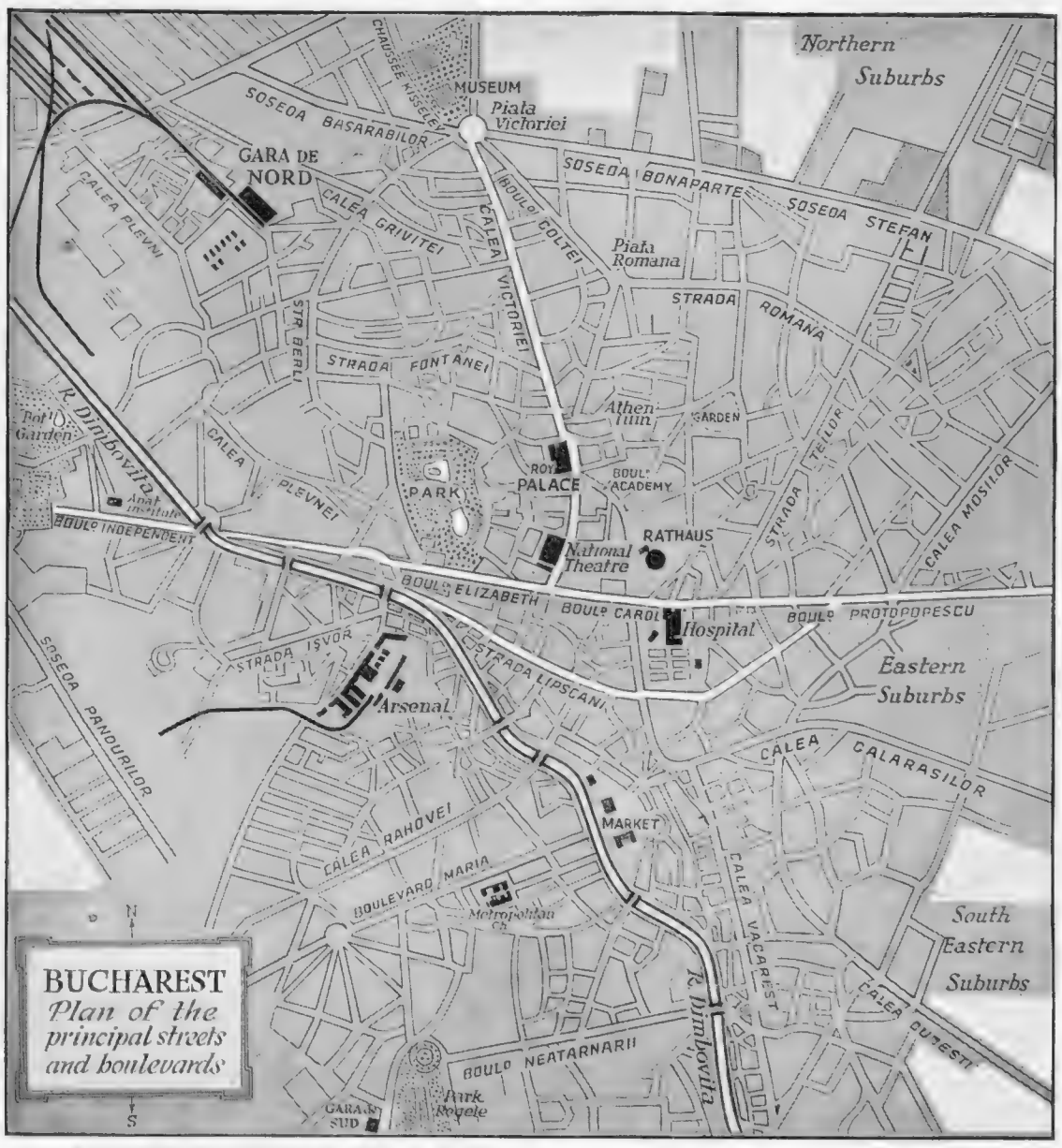
TWO CAPITALS AT DEADLY ENMITY: BUDAPEST RETALIATES ON BUCHAREST'S ACTION

BUDAPEST, THE CAPITAL OF HUNGARY, WHICH STILL STANDS FOR ITS FULL DEMANDS FROM RUMANIA

Budapest still desires to obtain from Rumania the whole of her formulated demands. The Vienna Award has given her the northern section down to the River Maros. The financial arrangements which arise out of the transfer of territory broke down, and M. Pop, the Rumanian representative, returned to Bucharest. Rumania expelled a large number of Hungarians and Budapest retorted by expelling Rumanians. And so it has gone on. This state of tension will cease as and when the Axis powers determine, for Hungary, which has just been traversed by German troops on their way to Rumania, is not in a position to dispute any suggestion or demand from Berlin. The city was to have had, this week, a new German newspaper to be called the *Deutsche Zeitung*. In the detailed drawing reproduced above, the famous capital of the Hungarian Kings is seen from the south, with the Parliament building and the Town Hall in the Pest half of the city. Across on the Buda side of the Danube is the great mass of the Royal Palace, backed by the Gellert Hegy heights, on which has been erected a Citadel which commands the whole city



BUDAPEST'S POSITION ON THE DANUBE: The Hungarian capital lies on the Danube where the River makes a dramatic turn to the south



BUCHAREST, THE "PARIS OF THE BALKANS," WHICH HAS ALREADY BEEN ABSORBED BY GERMANY

Bucharest, once a place of smart cafés and night resorts, has for some time past lost nearly all its mundane gaiety. Underlying every phase of Bucharest life has been the apprehension of approaching trouble, which has come by means of the Iron Guard and the invading German troops. Rumanians, and particularly the Bucharesti, have begun to realise that they have been badly let down. Already posters have appeared declaring: "Down with Hitler. Long live England. All good Rumanians wish for a British victory." The city of Bucharest, though smart enough in its modern quarter around the Calea Victoriei and the boulevards Elizabeth, Carol, and Protopopescu, is built on a flat, featureless plain. No heights break the level of the city. The Royal Palace, the National Theatre, the Town Hall, and the Academy are all gathered near the point where the Calea Victoriei meets the Boulevard Carol

BUCHAREST'S POSITION WITH REGARD TO THE DANUBE: Bucharest is actually on the Dimbovita, which reaches the Danube by way of the Arges River

WHAT THE CITIZEN DOES NOT SEE—HURRICANE DEFENDERS OF LONDON UP BEYOND THE CLOUDS: Spitfire and Hurricane fighter aircraft, each of which boasts eight machine-guns as armament, are the chief defenders of the Metropolis against enemy day bombers. Often, when there is considerable cloud in the sky, Londoners cannot see our defenders at work, as they are then above the cloud level; nevertheless, these men are never found wanting when it is a case of frustrating the enemy

AIR COMMENTARY BY CHARLES G. GREY (Founder of "The Aeroplane")

THE SCIENTISTS AND THE SLIDE RULE

Some of the Technical Considerations Involved in the Defence of London by Night

FOR years I have had a deep mistrust of scientists who juggle with slide rules. They are too apt to spread alarm and despondency, whether the practical men are trying to get a new and better type of aeroplane adopted or whether they are trying to defeat enemy aircraft. One of them produced lately a sum which is most unpleasant, thus:—

The Germans say that they are dropping 250 tons of bombs on London every 24 hours—perhaps we may accept that as a fact, if we include incendiaries and all. He reckons that up to Easter, 1941—six months—180 days—that means 45,000 tons of bombs.

The area of London is roughly 400 square miles—20 miles by 20 miles. One ton means four 500-lb. bombs, or eight 250-lb. bombs. Which, he calculated, would mean one bomb every 80 yards all over London.

That sounds bad—but it leaves out two important facts (*a*) that bombs do not necessarily distribute themselves mathematically and (*b*) that the R.A.F. will find very soon a way of stopping the dropping of bombs, just as General Ashmore, Commanding the London Air Defence Area, did in 1918.

General Stonewall Jackson, in the American Civil War, was, by repute, the first army commander to employ scientific engineers in the field. During one of his operations he had to get his army across a river. He sent for his engineers and told them to get out plans and drawings for a bridge, and he sent for one of his old Supply chiefs and told him to get together timber to build the bridge.

Next day the Supply man came to him and said; "Say, General, that bridge is built and the army can get right along. But we're still waitin' for them pictures."

That is the difference between the practical man and the scientific theorist. And that is why I believe that the R.A.F. will stop the bombers before they plant a bomb every 80 yards all over London.

Meantime London is being bombed day and night, and so are our other great industrial areas, and people do not like it. Newspaper people are exhorting the folk in the workshops to "make their benches their trenches." That has a nice rhyming swing about it, but it does not make sense. In fact, it is dangerous nonsense—and for the following reasons.

A trench is the best possible safeguard against bombs. A bench is worse than no protection; it is a danger. A bomb through a glass and iron roof, bursting among work-benches, vices, material in production, machine-tools and so forth, has all the workshop material added as missiles to its own explosion.

There are two alternatives for manufacturers and the Government. One is to carve vast caverns out of the hills—on the cut-and-cover principle—put the men and machinery in them, and carve dwellings for the men and their families in the hill-sides also. The other is to disperse the work of the factories all over the country in small units, exactly as the Germans have been doing for the past four years.

Either way means also dispersing the bombing all over the country districts, to the beauty spots, and innocent little country towns, of which a B.B.C.

AMERICAN—THE "EAGLE SQUADRON" OF THE R.A.F.: As stated in these pages last week, the first R.A.F. Squadron to be composed entirely of United States pilots is now being formed in England, and will shortly take its place as an operational unit of the Fighter Command. Thirty-four pilots, each with a minimum of 250 hours flying (several have done more than 1,000 hours) have already been enrolled. This picture shows a group of these American pilots returning from an advanced training flight in England

in his push towards the Capital. On misty days or when the German bombers can hop from cloud to cloud it is not an easy task to locate single high-flying aircraft, and this is the reason that, on occasion, a few of the enemy are able to penetrate the defences. Here a formation of Hurricanes are seen high up in cloudland on their way to engage raiders who have been reported as heading for the London area. This is an official photograph just released for publication by the Air Ministry

announcer, quoting an Air Ministry document, spoke so touchingly a week or so ago. For the great industrial centres will then be deserted, except for the iron-works and steel-plants and the collieries and the ports, which cannot be moved to truly rural areas.

Also, either way means conscribing labour, and sending the workers where they are wanted.

Furthermore, something must be done about the office staffs of the Big Business firms which still remain in London and the big cities. When the black-out, and the bombing, begins at about 4.30 p.m., no reasonable employer can expect his typists and girl clerks to travel for two or three hours, over what was normally an hour's journey, and keep normal office hours. Either properly safe sleeping accommodation must be found for the staffs, or they must quit coming to work.

But the cure for all that is to stop the bombing, and here we come back to the slide-rule scientists again. For years past—ten or fifteen—I have been preaching the doctrine "One machine, one man, one bomb." You can give the man two engines if you like, to give him a better chance of getting home if one motor is hit, or just packs up.

For years past the scientists—and some experienced but misguided Air Force people—have been proving to their own satisfaction that the scheme could not work. And now the Germans are working it on us.

For the past few weeks instead of sending over the big Heinkels and Dorniers at night they have been sending single-motor single-seater Messerschmitt 109's and twin-motor two-seater Messerschmitt 110's, each carrying only a couple of biggish bombs—250 lb. or 500 lb. They are fast and therefore harder for the guns to hit and for our fighters to catch and for the searchlights to hold. And the Air Ministry's official figures show that they are harder to bring down.

Three years ago a famous aircraft designer of foreign origin, but a British subject, put up a scheme which, if it had been developed, would have given us by now flocks of high speed single-motor bombers much faster than any existing fighter, and carrying a load as big as that of any heavy bomber of to-day. It was approved by competent Air Ministry people and experienced R.A.F. people, and then work on it was stopped by order. Some enterprising M.P. should ask, "By whose order?"

Last Christmas a famous English inventor put up a development of the same idea, not knowing of the other. That also was approved, and then turned down, because the slide-rule people said that it could not do what was claimed for it. They said the same about retractable undercarriages, Handley Page slots, flaps to give slow landings, all-metal structures, supercharged motors, hydraulic gun-turrets, and every other improvement.

If those two ideas had been pushed through experimentally and if, as the Americans say, "the bugs had been got out of them," the resultant types, or one combined type, would have been in real mass-production by now.

I am game to stake my reputation of thirty years in aviation—during which I have seen very many things adopted which the slide-rule merchants have scorned—on the rightness of these theories. And I say here and now that if those types were in production we could to-day send to Germany, and to any other bombable area, for a given total horse-power, twice and possibly three times the weight of bombs which could be carried in existing types of aeroplanes—whether British, American, German or Italian.

Instead of using big bombers bristling with guns, and overloaded with armament, ammunition, and armour, we should be beating the Germans at the fast bomber game. For there is the interesting scientific fact (not a slide-rule guess) that a bomber can always be built to fly faster than a fighter of the same horse-power for the simple reason that it does not have to manœuvre. But the highly-loaded high-speed bomber *can* become a lightly-loaded fighter when it has shed its over-load of bombs.

Meantime, without risking big fleets of bombers over London and our armament areas, where our terrific barrages of high-angle guns do make things unpleasant, the German high-speed bombers are coming over in quantities and are having a nuisance-value far beyond their danger-value.

If an enemy aircraft is heard or seen to be heading right over a factory the people must go to their shelters, whether it be a single-seater with a 250-lb. bomb or a four-motor Condor with a couple of tons. And that means so many man-hours lost, whether the bombs hit the factory or not.

And while these small, fast craft are wasting our man-hours and, logically, decreasing the increase of our output, although they may not be decreasing our output in comparison with the past, the Germans are saving up the aeroplanes which they would be losing over here if they had kept to their old mass tactics. Whether they intend to use their savings in a mass *blitz* on this country, or whether their reserve of dive-bombers and heavy bombers is being built up for a big drive to the Middle East, only Herr Hitler and Marshal Göring know—and they won't tell us.

A DUTCH PILOT'S PERSONAL VENGEANCE: A one-man air force, in the person of a Dutch pilot whose family was wiped out at the start of the Nazi offensive in the Low Countries in May, is carrying out nightly vengeance raids against German military objectives. He is Keone D. Parmentier, formerly chief pilot of the Royal Dutch Air Lines and a great figure in pre-war Civil Aviation. His raids have been principally directed against Rotterdam, where his family was killed. After each raid he drops a signed note telling the Dutch people where he will strike next. It is reported that the Nazis have placed a price equivalent to £2,500 on his head

Colonel Charles Sweeney, U.S.A.—I do not know whether he is a colonel in the Army of the United States or of China, or Venezuela, or Nicaragua, or of any of the several other countries in which he has fought—is now an honorary Group Captain in the R.A.F. Volunteer Reserve (R.A.F.V.R.) and is honorary O.C. the American Eagle Squadron, lately formed by the Air Ministry as an addition to our miscellaneous volunteer Allies. He had something to do, I believe, with the *Escadrille Lafayette* in the French Air Service in the last war. In a chat with another American for the B.B.C. recently, and in reply to the perfectly bromidic question, "What do you think of this war?" he answered, "Well, it's the only war we've got, so I guess we've *got* to think it's a good one."

Which is the perfect view of the professional soldier, only equalled by the British soldier in the last war who, when a kind old gentleman said to him, "This is a terrible war, my man," answered: "It is, but it's better than no war at all."

But the humble worker, whether in field or factory, is not so apt to think that it is a good war, or better than no war at all. In the words of Kipling's poem, "The Married Man," in the Boer War, "He wants to get on with the job. And he wants to get home to his tea." So he expects proper care for his and his family's safety to be taken by the Home Defence Authorities, and he expects the Service Authorities to get on with the war. And he will be disappointed unless both set about their work more intelligently and more energetically than they have done in the past.

Our village padre a Sunday ago told in his sermon of the little girl who ended her prayers with, "And, O God, do take care of yourself, for, if anything happens to you, we are done for."

Personally I resent religion being brought into war, because necessarily there are good Christians, or Muhammadans, or members of other religions, on both sides praying equally hard against one another, and always have been in all wars in all ages of all religions. But we might remember that "God helps those who help themselves," and assume that if we do not help ourselves with a sensible policy in the air and in the factories we *may* be done for. Let those who are set in authority over us use their heads, or the heads of those who can advise them, instead of using up the lives of the fighter and bomber pilots and air-crews.

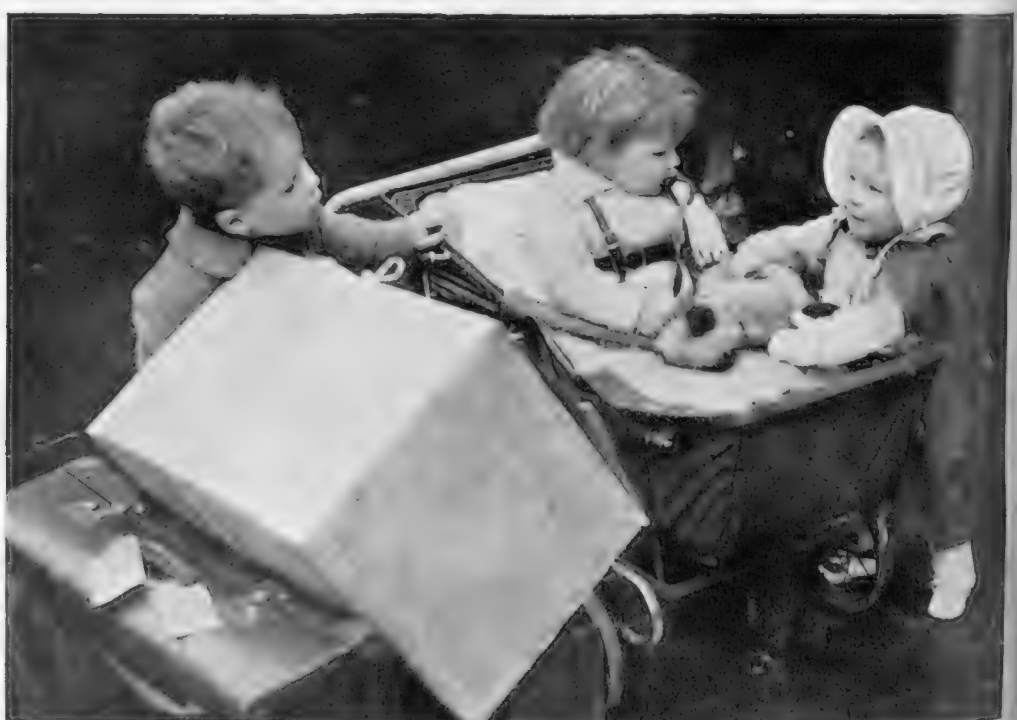
CANADIAN—THE SQUADRON COMMANDED BY A LEGLESS D.S.O. AIRMAN: This picture shows a famous fighter Squadron. During three recent engagements pilots of this Squadron have destroyed thirty-three enemy aircraft. Squadron-Leader Bader (in darker overalls in the centre of the group above) is a rare phenomenon in the R.A.F.—a legless pilot who is still in the Service; he was recently awarded the D.S.O. There are three D.F.C.s serving with this fine body of fighting men

JUST LIKE A PICNIC! BUT, NEVERTHELESS, WHAT A TRAGEDY

These brave little children are all cripples—inmates of a well-known Cripples' Institution in Sussex. When the Alert is sounded they have been taught to toddle off to the shelter—as if it were a "picnic"—even if the warning should come at meal-time

AT A CHILDREN'S HOME AND ORPHANAGE IN HERTFORDSHIRE: Alertness and apprehension are typified in this study of a group of children crouching beneath a table in the air-raid shelter. At this National Children's Home in Hertfordshire there are many little refugees from the bombed areas of London

EVEN IN THE COUNTRY, WOMEN AND CHILDREN ARE NOT SAFE FROM THE BOMBERS: A party of women and young children walking along a country road in East Anglia after evacuation from London were deliberately machine-gunned by a Nazi plane. Now, whenever an aircraft is heard overhead, they take immediate cover in the ditch



TWO STUDIES OF LONDON CHILDREN BEING EVACUATED TO SAFER AREAS: These children are from two districts which have been heavily bombed in East London, and from which children are now being evacuated by the L.C.C. to safer places outside the Capital. *On the left*, one tiny tot is examining another's identification label; and *above*, an interesting little discussion seems to be in progress as the three babies wait for the bus to take them to their new homes

AIR RAIDS make LIFE very difficult for the CHILDREN

Some New Pictures of the Innocent Victims of the Nazi Bombers

On right—
A number of small children are being housed for the duration of the war at Taplow in Buckinghamshire. They are taught by their nurses that the sound of the sirens is a signal for all of them to get their masks and take cover quickly and without panic. The terror tactics of the Germans are such that no one—man, woman or child—is safe when the bombers are overhead. And yet we are told that Hitler "loves little children"

AT A BABIES' NURSERY IN BUCKINGHAMSHIRE: SOME OF THE TINY INMATES, COMPLETE WITH GAS-MASKS, MARCH IN GOOD ORDER TO THE AIR-RAID SHELTER. AND ALL BECAUSE OF HITLER, "WHO LOVES LITTLE CHILDREN!"

A NOBLE DEVONSHIRE WOMAN AND SEVEN OUT OF NINE OF HER EVACUEE CHARGES

Mr. and Mrs. Dicker read of the terror raids on London, and promptly they decided to take two evacuee children at their small country cottage in Devonshire. They liked their two young charges so much that they decided to act as hosts to more of them—and now there are nine! Space being somewhat limited in the cottage, bath time is somewhat of a problem; but this is how Mrs. Dicker solved it, even whilst her husband has his supper!

ART TO DEFEAT THE BOMBS: Bombs have smashed the windows of big stores in Bond Street; at first boards were placed over the empty frames, but other ideas have now come into being. At one Linen Store the size of the windows has been reduced considerably and large wooden frames have been installed. The firm have now employed artists to decorate these wooden surrounds, and the effect is proving very pleasing to shoppers

SCHOOLGIRLS "PLAYING THEIR PART": "The Sunbeam Four" is the name that these four Worthing schoolgirls have adopted for giving concerts in aid of the local War effort. The girls originally collected a considerable sum of money for the local Spitfire Fund, now completed; they are continuing with their performances for further funds which they propose to send on to Lord Beaverbrook, Minister of Aircraft Production

LLOYD'S IN WAR-TIME: UNDERWRITERS IN THEIR UNDERGROUND BOMB-PROOF SHELTER DURING AN AIR RAID

BUSINESS GOES ON AS USUAL AT LLOYD'S DURING AIR RAIDS: When the famous Lutine Bell is now rung at Lloyd's in the City, it warns the underwriters and brokers that a raid is in progress. All then repair to the deep bomb-proof storerooms underground which have been transformed into a £50,000 steel and concrete shelter. This has been equipped as a complete underwriting room; and within a few minutes business is in full swing again. So fully equipped is the shelter that underwriters and brokers can get a snack there, can have their hair cut, buy cigarettes and even book theatre tickets in the row of underground shops

The World of Books—By Vernon Fane

The CHARM of FAMILY CHRONICLES

Sir Hugh Walpole Returns to the Herries; A New Light on Jane Fairfax; Some Recent Fiction; Mr Bernard Darwin's Memories

AUGUSTINE BIRRELL, who, in conversation, liked to affect strong prejudices after the manner of Dr. Johnson, once went off the deep end to me on the subject of collected editions and of those books called omnibuses. He had, he said, no use for tombstones; and he called the one-volume collections thumbachers.

Sir Hugh Walpole has reminded me of that particular growl by beginning on his Herries again. I do not possess a copy of *The Herries Chronicle*, nobly published in one volume at 8s. 6d., for the simple reason that I read and kept each book as it came out. But I had the impression that with the appearance of that thumbacher, complete with introduction, Sir Hugh had buttoned up his Herries for good and for posterity.

Seven hundred odd pages of **THE BRIGHT PAVILIONS** (Macmillan. 10s. 6d.) is a pretty substantial answer to that. Those Herries, you will remember, were English of the English. And there always was an England; though never quite an England like Elizabeth's England. A lovely, luscious period in which to set a Herries ancestor, for, as Sir Hugh reminds us, it was not all malmsey, maypoles and madrigals; poets, psalterers and jolly buccaneers, but an age that was also "ferocious, cruel, superstitious, greedy and courageous."

So, in the tale of Nicholas Herries and his altogether remarkable brother, Robin, Sir Hugh is able to allow himself to run the full gamut. He lets himself go on a witch-burning in some pages which I, for one, will never be able to forget, while the final reckoning with the villain (and Irvine is the dirtiest dog of a villain that ever marched in truth or fiction) is the grandest piece of long-drawn-out, heart-in-mouth fighting I have ever read. Nor are the rack and thumb-screws, as applied to the gentle Robin, any more forgettable.

Then there is all the stuff of Fotheringay, of the romantic tragedy of Mary of Scotland, which threads its way through the story; and the great Elizabeth herself in a vignette of old age in which the author rises to his full descriptive powers. But the Bright Pavilions are Robin's, and for all that the lusty Nicholas dominates the story, this is Robin's book.

I think that in *The Bright Pavilions*, Sir Hugh Walpole mustered all his talents to a grand display of virtuosity; that as he went along something of the vision of Blake—from whom the title comes—took hold, in the shape of at least one of his characters, and that the result comes very near to being his best novel.

On the score of virtuosity Miss Naomi Royd Smith's **JANE FAIRFAX** (Macmillan. 8s. 6d.) is a remarkable, stimulating and interesting exercise. For Jane Fairfax is straight out of Jane Austen's *Emma*, with many contributory characters from Fanny Burney, Maria Edgeworth, Mrs. Sherwood and William Makepeace Thackeray. In construction and style, too, it is in perfect period. The parody is so brilliantly executed that the term loses its meaning after the first few pages and the contemporary illusion is complete.

Even the most rabid Janeite will not quarrel with Miss Royde Smith's interpretation of the lovely Jane Fairfax and the turning of her into the heroine she deserves to be. The shade of Miss Austen might cast a startled eye at something which her own fastidiousness could not accommodate, but we feel that she would not wholly have disapproved.

Apart from the pleasure of being re-introduced to so many old friends in a new setting, the story recreates a period which has a curious parallel with our own. It is brilliant, unique, and deserves to be very popular.

If I am right in assuming that **THE CROWTHERS OF BANKDAM** (Collins. 9s. 6d.) is a first novel then Mr. Thomas Armstrong is to be congratulated upon a most impressive *debut*. It is a long, full family history; a formidable 240,000 words of West Riding saga which would test the prowess of even the most practised of novelists.

The book opens in the fifties, in the period when the woollen trade was beginning to establish its firm hold on the Yorkshire valleys. Bigger mills than Simeon Crowther's dominated Ramsfield in those days, and the great land-owning families were also firmly entrenched in the countryside. Those were also the days when cock-fighting was the principal local sport, and when the crowd at the Nag's Head would repair of a Thursday night to the Artisans' Hall for a shilling's worth of "The Regal Marionette Theatre."

Old Simeon had two sons so different in character from each other that they started the row which brought division to the point of feud in the Crowther family. Joshua was what is called a rightly Yorkshire type, shrewd and full of spirit, and with a sense of humour, and he married a weaver's lass. Zebediah was the exact opposite, an oily, ingratiating character, who married the daughter of the parish organist. Joshua and his descendants put everything they knew and most of what they had back into the Bankdam Mills. The other lot took their dividends, put back the minimum, and essayed to become local gentry.

If the book has a fault, it is that in the succeeding generations it has a sameness of theme and character. But if one persists, to the arrival of the delightful Viccy, and to the honest-to-God Edwin, both of whom were able to round off their lives and happiness in the last war, and to arrive at the final triumph of the last of the Simeon Crowthers, it must be admitted that the journey has been worth while.

It is many years now since Mr. A. S. M. Hutchinson swept into best-selling fame with *If Winter Comes*. That may not have been a book which suited all literary tastes, but at least it succeeded in capturing the popular imagination. Of his new book, **HE LOOKED FOR A CITY** (Michael Joseph. 9s. 6d.), Mr. Hutchinson says, "I believe that I have written at last the book I have always hoped to be able to write."

Here is an author who at least makes no pretence at eschewing sentimentality. The Rev. Gordon Brecque, Vicar of St. Luke's, Upton Springs, had no easy and comfortable road to that incumbency. From the day he was ordained life had been a struggle, but he had worked and established a lasting memorial to that work at St. John-in-the-Fields, which had begun as a Mission Hall. He had also married wisely, but on a pitiably small stipend.

His translation, if that is the correct word, to the living of St. Luke's, Upton Springs, begins a story full of hope and promise. He was a man of steadfast purpose, a little humourless perhaps, but endowed with some of the finest of all human graces. As life moved on so it brought its shadows, its tragedies, and disappointments. His son John was to die miserably in prison as a conscientious objector in the last war. His other son, Philip, so full of dash and courage, also brings trouble, while there is further tragedy in the end of the charming German maid, Minna, who became a victim to forces she could never understand.

The story ends with the passing of this man of God and his burial on Christmas Eve. It all sounds rather depressing, but in fact it is not. The journey of his life is told with such human understanding that the reader becomes absorbed in his problems and well attuned to the message at the end of the book, which is significantly entitled *Dawn*. Mr. Hutchinson is, as I have said, not ashamed of sentiment, but in this book he has disciplined it, as well as taking a firm hold on certain of his tricks of style.

In **LIFE IS SWEET BROTHER** (Collins. 12s. 6d.), Mr. Bernard Darwin has written his reminiscences, and, like everything that Mr. Darwin has written, it is a book which has a character and atmosphere of its own.

The golf correspondent of *The Times* is, I should say, almost unique among sports writers, in that he has a quite extraordinarily large band of devoted readers who know nothing of golf, and possibly care less. That in itself is so unique a quality that it would be almost presumptuous not to assume that although this book of reminiscences has been written by a man who, in his own words, has "fallen in love with a game," and in consequence is largely devoted to that obsession, who strings off lists of his heroes who can be but names to a lot of his readers, but to whom he rightly persists in according their full measure as heroes, it will cast the accustomed spell over the multitude of his admirers.

"I must be sorry," he says, "for those who have never been fond of games, even though I half envy their fine resourcefulness in doing without them. They have missed, though to be sure they do not know it, so much friendly, if sometimes agonising, pleasure, so many days in the sun. I am a little sorry for those, and I must number myself among them, who would have got still more fun out of games if they had not minded so desperately what befell in them."

He calls himself "a sort of journalist," but he is a journalist who is perhaps the greatest living authority on Dickens, and on many other things as well. He might have been—perhaps he ought to have been—a scientist worthy of a great name.

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MINISTRY OF FOOD

THE WEEK'S FOOD FACTS No. 13

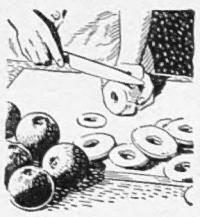
WE help the war effort if we buy what happens to be plentiful in our own locality. Stocks naturally vary a little in different parts of the country, but here is a "plenty list" which applies to most places:

HOME-KILLED MEAT · COFFEE · POTATOES
OATMEAL · HOME-GROWN VEGETABLES

ON THE KITCHEN FRONT

How to Dry Apples

We may be short of apples later in the year—through bringing munitions instead of apples in the ships from Canada. So here is a way of preserving the present supply—it can be used for windfalls or blemished fruit.



Wipe the apples, remove cores with a round corer and peel thinly. Cut out any blemishes. Slice into rings about ¼" thick. Steep the rings for 10 minutes in water containing 1½ ozs. salt to the gallon.

Thread the rings on sticks or spread on slatted trays or cake racks covered with muslin. Dry in a very cool oven (leaving the door open to let the steam escape) or over a hot cylinder or on the rack of a stove, until they resemble chamois leather. The temperature should not exceed 120°F. At this heat the process usually takes about 4 hours. Turn once or twice during drying. Cool for 12 hours, then pack in paper bags, jars or tins and store in a dry place.

How to Make Porridge

A double saucepan or porringer is excellent for making porridge. If you have not got one, use a 2 lb. stone jam jar in a saucepan of boiling water.

Allow 2 ozs. medium oatmeal to 1 pint water. Bring the water to the boil. Sprinkle in the oatmeal, stirring all the time. Sprinkle slowly so that the water does not go off the boil. Boil and stir for 5 minutes then put in a level teaspoonful of salt. Cover the pan and simmer for about 45 minutes, stirring occasionally.

If you have a hay-box (see Food Facts No. 12 for how to make one) boil the porridge for 5 minutes as before, then leave in the hay-box all night. In the morning reheat and serve.

Two Ways with Swedes

BAKED

Swedes are delicious baked round the joint. Peel them thinly, cut into neat cubes and arrange round the meat in the baking tin. Baste from time to time. When they are golden brown they are ready.

MASHED

If preferred, boil the swedes in a very little salted water until tender. Drain (using the water for gravy) and mash with a little dripping. Add a dash of pepper and serve piping hot.

Home-Killed Meat

Buy home-killed meat — and so assist our farmers and help to build up our reserves of imported meat. This needn't increase your housekeeping bills. Home-killed second quality is as good as imported and just as cheap. For instance, home-killed second quality boneless silverside, which goes such a long way with carrots and dumplings, costs 1/4d per lb.

Beef cuts for stews are excellent bargains. Boneless neck of beef (1/2d per lb. first quality and 10d second quality) is ideal pie and pudding meat. You can make rich soups from clod and sticking, or knee joints (get the butcher to crack the bones for you).

Other economical cuts are brisket of beef, breast of mutton, sheeps' hearts, hand with foot (pork), and knuckle of veal.

Turn on your wireless at 8.15 every morning to hear useful hints and recipes.

THE MINISTRY OF FOOD, LONDON, S.W.1

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FILM and STAGE CARRY ON IN LONDON TOWN

"SALOON BAR" AS A FILM AT THE GAUMONT: Gordon Harker has a very fat part in the film version of *Saloon Bar*, the action of which takes place in a London public house. It was produced by Michael Balcon and directed by Walter Forde at the Ealing studios; its action is brisk and entertaining and one follows with keen interest the efforts of the amateur detectives to fasten the guilt on the real criminal. Gordon Harker becomes a convincing sleuth; Elizabeth Allen (*left*) does the honours of the bar in attractive fashion

On left—**"ALL'S WELL THAT ENDS WELL"** has been running with good matinee audiences at the Vaudeville Theatre. Mr. Robert Adams, the producer, himself takes the part of Lafeu, the caustic but good-hearted courtier. Barbara Everest is here seen as the Countess and D. G. Milford as Rinaldo. It is a rare opportunity to see this entertaining but seldom acted play

LIFE UNDER NAZI RULE: The effect of the growth of the Nazi power over an individual German family is shown with poignant effect in *The Mortal Storm* which has been showing with success at the Empire, Leicester Square. The two step-sons of Professor Roth join the new movement; Freya, his daughter (Margaret Sullavan), breaks off her engagement with her fiancé because of his activities, and gradually the whole family is riven apart. Mrs. Roth, the mother, is played by Irene Rich. In this railway carriage scene the baggage and personal belongings of the family are scrutinised by officials

On right—**THE NON-STOP REVUE AT THE WINDMILL HAS CONTINUED NON-STOP:** The 137th edition of Revudeville has continued at the Windmill Theatre in spite of celestial embarrassments. Huia, in an attractive siren suit, is chatting with Paddie in the act of dressing while sitting on her mattress bed

THE SPHERE IN WARTIME

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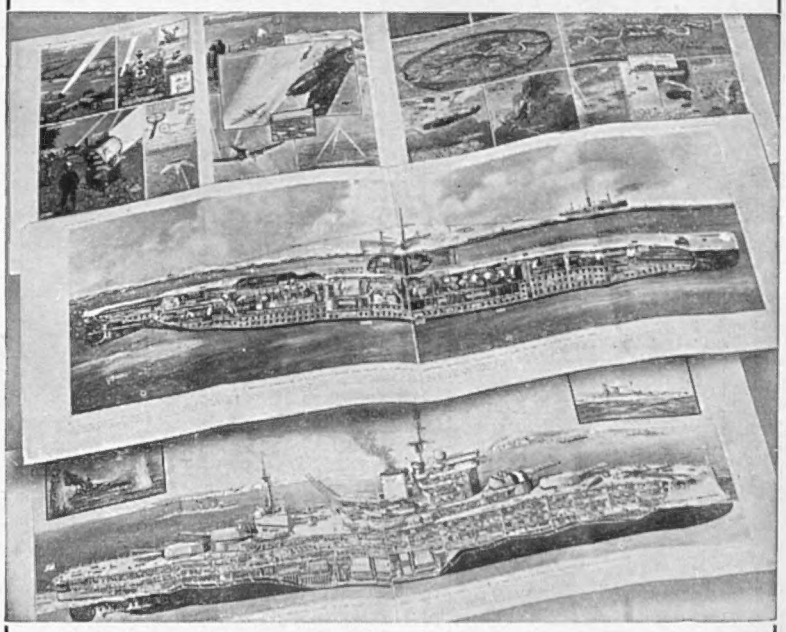

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In Quest of Good Hotels

By ASHLEY COURTENAY

ALTHOUGH history is being made daily and will make thrilling reading for the generations that follow this one, I still find a tremendous thrill in seeing places that are steeped in the history of the past—a thrill which is probably shared by many other people.

History in the making is not so much exciting as terrifying, and there is nothing thrilling about walking through London's debris-strewn streets, watching demolition workers at their thankless task. But there *is* a thrill, and a welcome refresher for the mind, in taking your leave, your short holiday, or whatever it may be, into a part of the country that is steeped in old-world romance—such as Wales.

I wonder how many people have seen Conway Castle, its background of white-capped mountains glowing rose-red in the setting sun? Its old grey walls are 15 ft. thick, a comforting thought in these blitz-conscious days! The little town that nestles at its feet is equally attractive, and though the sad story of Richard II, the Unlucky, haunts Conway, the impression you get as you walk round the battlements is one of mellow peace rather than melancholy.

"And how in these days is one to visit Conway?" you will ask; "it is a long way for a bicycle tour." Bicycles, and even cars, may be out of the question, but if you have a few days to spend at leisure, I would suggest your going to the Castle Hotel, Bangor, and making that a headquarters from which to operate. Most of the hotels in Wales are simple, rather than luxurious, and this one is no exception to the rule, but it has a comforting and comfortable air, and is situated in the midst of some of the loveliest scenery in the country. Until a few weeks ago a second choice in this direction could have been Gogarth Abbey, now commandeered.

A moderately narrow strip of water is separating Hitler from his desires, but the even narrower strip which separates the Green Isle of Anglesey from the Welsh mainland presents no difficulties to the traveller who wishes to cross it. This narrow channel of the Menai Straits, sometimes as vividly blue as any Italian sea, brings you to beauty, though in 1 A.D. when Anglesey, then known as the Isle of Mona, was invaded by the Romans, beauty was not uppermost in their minds. For Britons stood packed on the island's shores, prepared to defend it from the invader, who was attempting to land infantry in flat-bottomed boats. But the loveliness is there to-day, and from the seaside hamlet of Bull Bay, cosily installed in the Bull Bay Hotel, you can explore the coast, take in deep draughts of sea air, walk, play golf, and return at night from your exercise certain of good food and a comfortable bed.

There is a Cornish-like arm of Wales, sticking out from the southern end of Caernarvon, reminiscent of Land's End, and so far from the rest of civilisation that the inhabitants are reputed to live in happy ignorance of many of the unpleasantnesses of this modern world. Definitely the place for a holiday just now!

Round the bend of Caernarvon Bay, and right on the coast, is Morfa Nevin, a comparatively simply spelt place as Welsh places go! Two minutes' walk from the beach will bring you to an attractive modern hotel, the Linksway; built only in 1936, it has no outward pretensions to beauty, but its thirty bedrooms are all fitted with hot and cold water, and many of them have electric fires also. If you are a climbing enthusiast, without the practised climber's skill, here is your playground, for there is "easy" climbing to be had quite close by, and 30 miles away stands Snowdon, for the more ambitious. While for those who love the views that the heights display, but cannot face the exertion, there is the Festiniog Toy Railway.

Lovers of old churches who stay at Morfa Nevin must make the three- or four-mile journey farther north to Clynnog-fawr, where there is the most beautiful specimen of Tudor church you can ever wish to see. A steep path, leading from the lych-gate between gravestones and ancient trees, brings you to a building that has withstood the winds and the rains of centuries, and will stand for many more; a welcome symbol of solidity in this ever-changing present-day world.

Some people are never satisfied until they have seen the very end of a road or a stretch of country; for those I would suggest a visit to Aberdaron, right in the "Land's End" of Wales—remote Wales indeed; dogs are apt to run from your car. Children speak an unintelligible language, but at the Ty Newydd Hotel you can get any brand of English drink for which you ask. More than this, Mrs. Jones—her name really *is* Jones—will see that you are made comfortable, and though from your bedroom window you may be looking across to Bardsey Island, whose forty-eight inhabitants seldom if ever reach the mainland because of the treacherous 4 miles of intervening sea, that same bedroom is as up to date in its equipment as though it were in a Midland town.

Any Welshman will tell you that there is only one road more beautiful in Wales than the road from Barmouth to Dolgelly, and that is the road from Dolgelly to Barmouth! At all events, if you are in this district at all, and it is possible to explore it, it is certainly well worth doing so, for the scenery is magnificent, no matter which way you take it. If you are tempted to stay in this part of the world you can make your headquarters the Trefeddian Hotel, Aberdovey, which faces due south-west, and looks over a golf course and the sea. From almost every one of the forty-seven bedrooms coast and mountains combine to offer you glorious views; the quaint little harbour is a picture in itself. Golf, walking and sea fishing for your out-of-door sport, and a badminton court for those who, when they come in again, still feel energetic.

For those who prefer their rest and their sport inland, there is Lake Vyrnwy, with the Lake Vyrnwy Hotel on its shores, and fishing and plentiful shooting to be had, while, as is almost universal in Wales, the scenery is beyond compare.

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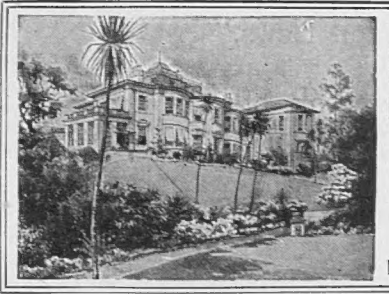

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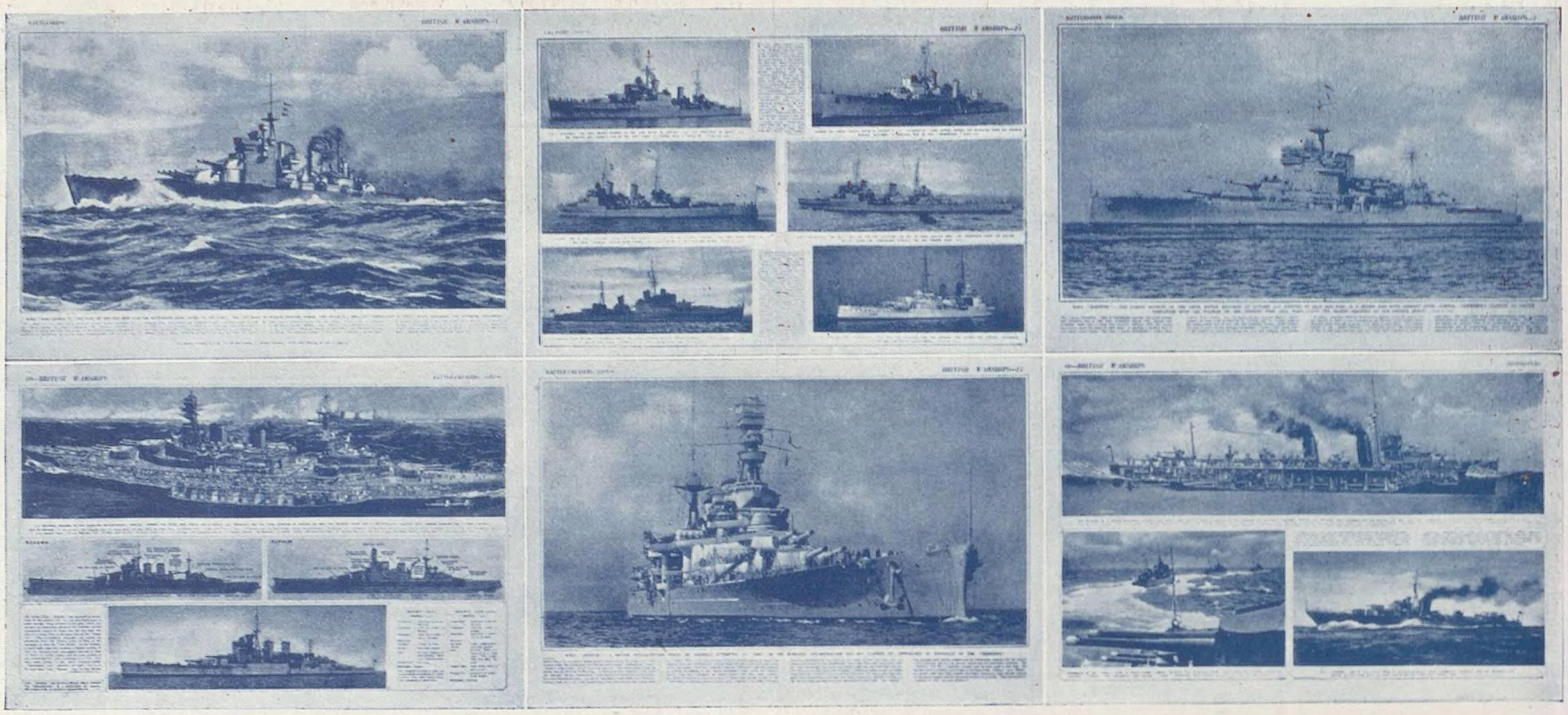

Completely illustrates and describes

THE ROYAL NAVY

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